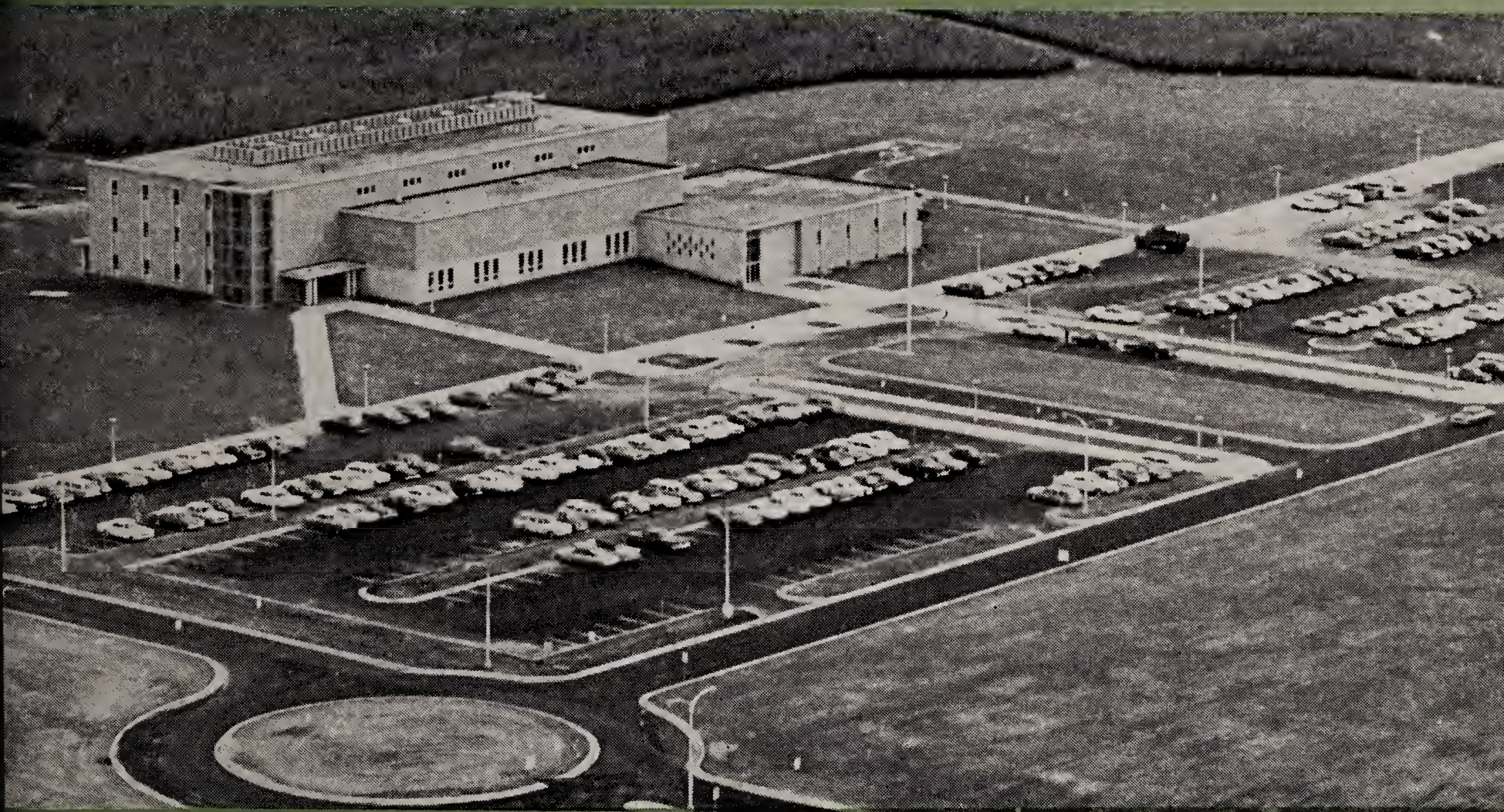


ANNOUNCEMENTS 1969-70



North Central Campus

Westville

PURDUE UNIVERSITY BULLETIN

University Calendar

1969

SEPTEMBER							NOVEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5	6						1
7	8	9	10	11	12	13		2	3	4	5	6	7
14	15	16	17	18	19	20		9	10	11	12	13	14
21	22	23	24	25	26	27		16	17	18	19	20	21
28	29	30						23	24	25	26	27	28
								30					
OCTOBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4		1	2	3	4	5
5	6	7	8	9	10	11		7	8	9	10	11	12
12	13	14	15	16	17	18		14	15	16	17	18	19
19	20	21	22	23	24	25		21	22	23	24	25	26
26	27	28	29	30	31			28	29	30	31		

1970

JANUARY							MAY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2	3					1	2
4	5	6	7	8	9	10		3	4	5	6	7	8
11	12	13	14	15	16	17		10	11	12	13	14	15
18	19	20	21	22	23	24		17	18	19	20	21	22
25	26	27	28	29	30	31		24	25	26	27	28	29
								31					
FEBRUARY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6	7		1	2	3	4	5
8	9	10	11	12	13	14		7	8	9	10	11	12
15	16	17	18	19	20	21		14	15	16	17	18	19
22	23	24	25	26	27	28		21	22	23	24	25	26
								28	29	30			
MARCH							JULY						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6	7			1	2	3	4
8	9	10	11	12	13	14		5	6	7	8	9	10
15	16	17	18	19	20	21		12	13	14	15	16	17
22	23	24	25	26	27	28		19	20	21	22	23	24
29	30	31						26	27	28	29	30	31
APRIL							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	4						1
5	6	7	8	9	10	11		2	3	4	5	6	7
12	13	14	15	16	17	18		9	10	11	12	13	14
19	20	21	22	23	24	25		16	17	18	19	20	21
26	27	28	29	30				23	24	25	26	27	28
								30	31				

First Semester

September 10
Classes begin
November 25
Thanksgiving vacation begins
December 1
Classes resume
December 20
Christmas vacation begins
January 5
Classes resume
January 10
Classes end and reading period begins
January 13
Final exams begin
January 21
Semester ends

Second Semester

February 2
Classes begin
March 28
Spring vacation begins
April 6
Classes resume
May 23
Classes end and reading period begins
May 26
Final exams begin
June 3
Semester ends
June 7
Commencement

Summer Sessions, 1970

June 15-August 7
Regular 8-week Session
No classes on July 4
June 8-26
First Intensive Session
June 29-July 17
Second Intensive Session
No classes on July 4
July 20-August 7
Third Intensive Session

PURDUE UNIVERSITY BULLETIN

Volume 69

January 31, 1969

Number 11

Second class postage paid at Lafayette, Indiana. Issued by Purdue University 22 times a year: three times each in January, February, twice in March, April, May, and June, and December; once each in July, August, September, October and November.

North Central Campus

Announcements for the Year 1969-70

PURDUE UNIVERSITY



LAFAYETTE, INDIANA

PUBLISHED BY THE UNIVERSITY

Journal of the American Chemical Society

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

Published by the American Chemical Society

Washington, D. C.

Volume 75, No. 1, January 1953

CONTENTS

Officers of Administration and Instruction	4
General Information	5
Admission	6
Registration	11
Student Services	12
University Fees	13
Grading	14
Plans of Study	19
Agriculture	19
Engineering	21
Home Economics	24
Humanities, Social Science, and Education.....	24
Industrial Management	28
Science	30
Technology	34
Graduate Study	45
Administrative and Instructional Staff	47
Index	49

PURDUE UNIVERSITY

Regional Campus Administration

Lafayette, Indiana

OFFICERS OF ADMINISTRATION AND INSTRUCTION

Administrative Officers

FREDERICK L. HOVDE, B.Ch.E., M.A., D.Sc., LL.D., D. Eng.,
D.H.L., D.C.L., Pd.D., D.Ed.....President
LYTLE J. FREEHAFFER, A.B.....Vice President and Treasurer
GEORGE A. HAWKINS, Ph.D.....Vice President for Academic Affairs
FREDERICK N. ANDREWS, Ph.D., D.Sc.....Vice President for Research and
Dean of the Graduate School
DONALD R. MALLETT, Ph.D.....Vice President for Student Services
C. H. LAWSHE, Ph.D.....Vice President for Regional Campus Administration

Regional Campus Administration

G. W. BERGREN, M.S.M.E.....Administrative Dean for Academic Affairs
N. M. PARKHURST, M.S.....Registrar
J. E. THATCHER.....Assistant Comptroller
D. A. SCOTT, Ph.D.....Administrative Dean for Development
H. W. WHITE, M.S.....Director of Admissions

North Central Campus Administrative Staff

ROBERT F. SCHWARZ, M.S.....Dean and Director
JAMES R. BLACKWELL, M.A., M.B.A.....Assistant Dean
DAVID P. KONZELMANN, M.S.....Admissions Officer
WILLIAM C. BOYD, M.Mus.....Coordinator of Continuing Education
JOHN K. BLACK, B.S.I.M.....Business Administrator
JOHN J. WAGLIARDO, M.Ed.....Student Affairs Officer
RICHARD G. MEHLER, M.S.....Registration Officer

General Information

CENTENNIAL YEAR, 1969, marks 100 years of growth and progress for Purdue University. From an institution of six instructors and 39 students, Purdue, Indiana's land-grant college has grown to a major university with a faculty of 2,100 and a student body of more than 36,000 on five campuses.

LOCATION

Purdue University has, in addition to its main campus in West Lafayette, established a series of regional campuses for the purpose of offering educational opportunities in the major population areas of Indiana. The new North Central Campus is an outgrowth of the former Barker Memorial Center which was located in Michigan City. The North Central Campus serves communities in the north central part of the state. It is located on a 216-acre site at the junction of the Indiana East-West Toll Road and U. S. 421, at Westville.

HISTORY

Following World War II Purdue University started offering courses in facilities loaned the University by the Michigan City and LaPorte schools. The programs in each of these areas grew and in 1948 the Barker Welfare Foundation made available to the University the old John Barker mansion. All of the area classes were consolidated in this fine old structure in the spring of 1949. Through the 1950's enrollments at the Barker Memorial Center continued to grow, as did the population of the north central region of the state. By the early 1960's it was evident that this part of the state was due for a population boom and significant industrial expansion and Purdue began to make plans for a new regional campus that could more adequately serve the area.

In May of 1962 Purdue University, through the Ross-Ade Foundation, purchased 160 acres in LaPorte County at a location that could best serve the Tri-City area of LaPorte, Michigan City and Valparaiso.

With the site available, serious planning started on the development of the first building for the new campus. This building, containing 90,000 square feet provided modern academic facilities when it opened its door in September of 1967.

ORGANIZATION

The North Central Campus operates as an integral part of Purdue University. Faculty members hold their appointments in Purdue departments and teach courses under departmental control. Course numbers and content are the same for all campuses of the University. Faculty members receive promotion through a university-wide promotion system.

PURPOSE AND FUNCTION

Purdue University North Central Campus is dedicated to service in the land grant tradition. It provides university facilities for community service. It brings the educational opportunity of a great university to a constantly increasing number of regular university students working toward degrees, while it provides similar opportunities to others on a part time basis. At the same time, educational activities, related to the nature of the population and the industrial development of the area, help serve other educational needs of the community.

In accordance with a long-standing policy of the Board of Trustees, all educational services and programs of the University are available and open to all academically qualified individuals without any discrimination whatsoever with respect to race, creed, or national origin.

SPECIFIC COURSE DESCRIPTION

Descriptions of specific courses may be found in the individual school catalogs.

PROGRAMS

Academic work at many different levels is offered at the North Central Campus. Freshmen and sophomore level work, in most of the curricula offered by the University, leading to Bachelor of Science or Bachelor of Arts degrees may be completed at this campus. Also available to area students are programs of the new and growing School of Technology, which lead to an Associate Degree in Applied Science and are usually two years in length. Included in this school is the Purdue University nursing program.

Selected courses and programs at the graduate level for area teachers are available. Certificate programs varying in length are offered to interested area residents. Also available are a wide variety of continuing adult education activities conducted to meet the needs and requests of the region.

Many students who do not plan to complete a degree at any of the campuses of Purdue University use the North Central Campus to obtain one or two years of credits for transfer to other universities. Because the work taken at the North Central Campus carries regular Purdue University credit, transferability to other universities presents no problem.

Admission

GENERAL REQUIREMENTS

ALL PERSONS wanting to take advantage of the opportunity for higher education at the North Central Campus of Purdue University must file an application for admission. Requests for information and application forms should be addressed to the Office of Admissions, Purdue University, North Central Campus, Junction U. S. 421 and Indiana Toll Road, Westville, Indiana 46391. Students pursuing the baccalaureate, and associate degree programs must be high school graduates. A prospective student should complete the application according to instructions and then forward the form to the high school from

which he is to be or already has been graduated. The high school should then complete the application and return it to the Office of Admissions, Purdue North Central Campus, Junction U. S. 421 and Indiana Toll Road, Westville, Indiana 46391. High school students should make application during their seventh semester of high school, or as soon as possible thereafter. High school graduates should make application immediately. This enables the University fully to evaluate an applicant's eligibility for consideration and to notify the applicant at an early date of the action taken, thus allowing the applicant to make his educational plans.

An individual's eligibility for consideration will depend upon many factors, among which are: (1) subject matter requirements for the school or program to which he is applying; (2) high school class standing; (3) College Entrance Examination Board test results; (4) high school comments and recommendations; (5) previous college work, if any; and (6) other personal information.

1. Subject Matter Requirements—The table below shows the minimal requirements for each school within the University.

Although meeting the minimum subject matter requirements may qualify a student for consideration for admission, it may not qualify him to meet the competition of his classmates. Individuals with one required subject deficiency in their high school background may be eligible for consideration if they rank in the top one-third of their high school graduating class and are otherwise well qualified.

High school students who desire to study engineering, mathematics, chemistry, or physics should establish credit in the following high school subjects in addition to the minimum requirements in order to graduate in eight semesters: a fourth semester of algebra and a full year of both physics and chemistry

2. High School Class Standing (Indiana residents)—Preference is given to applicants in the upper half of their high school graduating class. Applicants who rank in the lower half but *above* the lowest third (33rd percentile to 50th percentile) may be given consideration for admission if additional factors indicate that they have a reasonable chance for success at Purdue.

Curricula	High School Graduation	1 Unit Algebra	½ Unit Advanced Algebra	1 Unit Plane Geometry	½ Unit Trigonometry	1 Unit Laboratory Science	3 Units English	1 Unit Social Studies	Total of Not Less Than 15 Units
Agriculture and Forestry	x	x		x		x	x	x	x
Engineering	x	x	x	x	x	x	x	x	x
Home Economics	x	x		x		x	x	x	x
Physical Education (Men)	x					x	x	x	x
Science	x	x	x	x	x	x	x	x	x
Humanities, Social Science, and Education*	x	x		x		x	x	x	x
Industrial Management	x	x	x	x	x	x	x	x	x
Industrial Education	x	x		x		x	x	x	x
Technology, two years	x	x		x		x	x	x	x
Technology, B.S.	Two-year associate degree								
Pharmacy	One year of prepharmacy in School of Science								
Veterinary Science and Medicine	Two years of preveterinary curriculum								

3. College Entrance Examination Board (CEEB) tests—All applicants who have not recently completed a full year of college study are required to submit their results on the Scholastic Aptitude Test (SAT) and achievement tests in English, mathematics, and chemistry (students who have not had chemistry may substitute physics or biology). High school students should take the SAT in May of their junior year and the achievement tests in March or May of their senior year. Complete information concerning CEEB testing is available at most high schools, or persons may write directly to: College Entrance Examination Board, Box 592, Princeton, New Jersey 08540. High school graduates who do not file their application in time to arrange for the required tests should contact the Office of Admissions immediately.

On the basis of the factors considered, action on the individual's application may be one of the following:

1. Granted unqualified regular admission—this means that the applicant has met all entrance standards and requirements for admission.
2. Admitted unclassified (on probation)—this applies to the applicant whose academic background and preparation does not meet the entrance

standards and/or requirements, but who the University feels has a reasonable chance of gaining regular admission at a later date.

3. Admission denied or postponed until an adequate academic background and preparation can be demonstrated.

Any admission to the University is provisional pending the receipt of all required student information. The University reserves the right to cancel any admission if a student fails to provide all necessary credentials.

NONRESIDENT ADMISSION

Out-of-state applicants must complete the same general requirements as Indiana residents. In addition, nonresident applicants should rank in the highest quarter of their high school graduating class or in the highest quarter of the College Entrance Examination Board SAT test in order to be eligible for consideration. Students who are not in the highest quarter but that are in the upper half of their class (50th percentile to 75th percentile) may be given consideration. Nonresident transfer students must have a "B" average in all previous college work (see "Transfer Students" below).

TRANSFER STUDENTS

An applicant transferring from another college or university must fulfill the following requirements in order to be considered for admission:

1. Submit an application for admission on the prescribed form through the high school from which he was graduated, including the College Entrance Examination Board test results.
2. Forward an official transcript of work done in institutions previously attended to the Office of Admissions at the North Central Campus.
3. Indiana Residents only—Have a "C" average in all work done in institutions previously attended. Persons who do not have a "C" average but show academic potential may be given consideration.
4. Nonresidents only—Have a "B" average in all previous college work.

Credit earned at other institutions with the grade of "C" and above will be evaluated in terms of how it fulfills the graduation requirements at Purdue University. Evaluation of credit is completed after a student is admitted to the University.

NONDEGREE STUDENTS

Persons who desire to take advantage of the instruction in any of the departments of the University without undertaking one of the regular plans of study and without becoming a candidate for a degree may be admitted as nondegree students. Such students must present evidence that they are prepared to undertake the work desired and must progress satisfactorily in their work.

Admission as a nondegree student is for one semester only and any further enrollment must be approved by the Office of Admission. A maximum of 11 credit hours may be taken in any one semester and a maximum of 24 credit hours may be taken while classified as a nondegree student.

-
- * 1. By 1970 four units (years) of English shall be required for admission to the School of Humanities, Social Science, and Education.
 - 2. By 1971 two units (years) of foreign language shall be required for admission to the School of Humanities, Social Science, and Education.

A personal interview is required with a member of the Office of Admissions staff prior to admission as a nondegree student. Any student who is registered in another college or university and wishes to attend Purdue during the same semester must submit a letter from the other institution approving the specific courses to be taken at the North Central Campus. All students who have been previously enrolled in another institution must have a letter of good scholastic and social standing on file with the Office of Admissions prior to enrollment. Application for admission as a nondegree student should be made to the Office of Admissions at the North Central Campus.

REENTRY STUDENTS

Any person in good standing who has formerly attended Purdue but has not been in attendance for a semester or more must submit an application for reentry. Each individual situation will determine the status of the person's eligibility for reentry.

READMISSION OF STUDENTS

Any person who has been formally dropped from the University for academic reasons and wishes to reenter must make application for readmission to the Faculty Committee on Scholastic Delinquencies and Admissions. Forms for initiating this procedure are available in the Dean of Men's Office on the Lafayette Campus, or in the Student Affairs Office at the North Central Campus.

ADVANCED CREDIT

The University wishes to give recognition in the form of advanced standing and credit to students who have successfully completed college level work in their high schools. There are two basic ways in which credit may be established:

1. College Board Advanced Placement Tests—Students with advanced training in a particular subject area should take the appropriate examination and have the results forwarded to Purdue.
2. Purdue Advanced Credit Examinations—A number of students may be invited to take special examinations in various subject matter areas as determined by evidence of competency in CEEB testing and high school work.

Advanced standing and credit should not be confused with placement. Placement involves having students start at the correct level of a course within the freshman sequence. High school record and College Board SAT and Achievement test results are employed in making these placements. Placement involves no advance credit.

AUDITING CLASSES

Courses may be audited. No grades or credits are received. Attendance in class is permissible when the regular class fees are paid and the individual has declared himself as a visitor or listener.

RESERVE OFFICER TRAINING

Male students planning to transfer to the Lafayette campus are now eligible for a new two year Advanced ROTC Program leading to a commission in the Air Force, Army, or Navy. The program is available to anyone having

four full academic semesters remaining on the Lafayette campus, including graduate school.

Students applying for this program and accepted by the service concerned attend a six week summer training camp during the summer immediately preceding their planned entry into ROTC classes, which may be either in the fall or spring semester. This six week training substitutes for the first two years of basic ROTC, and for Air Force Cadets the summer camp is normally attended between the junior and senior years. Students are paid approximately \$120 during this six weeks plus transportation, housing, and all meals.

Two-year students receive the same benefits as four-year ROTC cadets or midshipmen. These include draft deferment, \$40 per month allowance, free uniforms, and free military textbooks. Flight training is available in the last year for those who are interested and qualify. This consists of about 36½ hours of flight instruction and 35 hours of ground school at no cost to the student. Upon completion the student may be granted a private pilot's license.

There is no obligation incurred in applying for this program, taking the examinations (and in the case of the Air Force and Navy attending the six-week summer training). Applications are accepted at any time up to about March 1 preceding the six-week summer training.

For further information and additional details you may call or write:

Professor Aerospace Studies
U. S. Army ROTC
Purdue University
Lafayette, Indiana 47907
Telephone: 749-2808

Professor of Military Science
U. S. Air Force ROTC
Purdue University
Lafayette, Indiana 47907
Telephone: 749-2614

Professor of Naval Science
U. S. Naval ROTC
Purdue University
Lafayette, Indiana 47907
Telephone: 749-2805

Registration

ADVANCED REGISTRATION

CURRENT STUDENTS should preregister for fall, spring, and summer sessions at announced times. New students should preregister at the times specified by the registration officer. Advanced registration eliminates standing in line and assures preferential scheduling.

DELAYED REGISTRATION

For students who are unable to preregister, a registration period is held just prior to the beginning of classes. Consult the current semester schedule for dates and times.

LATE REGISTRATION

The late registration period for the fall and spring semesters ends one week after the first day of classes. In the summer session, the late registration period closes three days after the first day of classes. Late registration fees are explained on page 13.

DROPPING AND ADDING COURSES

A student may add a course to his schedule only during the first week of classes (first three days of summer school). In order to effect a withdrawal from any class, a student must notify the Registration Office at the time of withdrawal. Discontinuance of class attendance is not the basis for withdrawal, and students who do not notify the office when they plan to withdraw will be given a failing grade in each course involved. To drop a course, consult the fee refund schedule on page 13 and the directed grades explanation on page 14.

TRANSFER OF ENROLLMENT TO THE LAFAYETTE CAMPUS

Upon the completion of any semester or summer session a student may transfer his enrollment from the North Central Campus to the Lafayette campus. To initiate this process the student must report to the registration officer and complete the necessary forms. Following this procedure he will receive an "Authorization for Enrollment" form from the Lafayette campus along with instructions for registration. Transfer students must return the student health form to the Health Center before registering at the Lafayette campus. Only students attending on regular status may transfer to the Lafayette campus. It is not recommended that a student transfer at mid-year.

Student Services

GENERAL COUNSELING

COUNSELING PERSONNEL are available for consultation about any matters of personal or general concern. Assistance is available in such matters as financial aid, job placement, campus activities, housing, and part-time employment.

Faculty advisers are assigned to assist each student to work out a program of study that will include all required courses and a wise choice of electives.

FINANCIAL AID

Scholarships

No student may be considered for financial assistance until he has been admitted to the University. High school students who plan to attend Purdue should apply for admission after completion of the junior year and arrange to take the appropriate College Entrance Examination Board Tests in May of that year in order to insure early consideration of their requests for financial aid.

Students should make clear when filling in the application for financial aid that they plan to attend the North Central Campus. Most scholarship applicants will be notified of the action on their applications before their graduation from high school.

National Defense Loans

Entering freshmen follow the same procedure outlined for acquiring scholarships except that requests for loan applications should be directed to the

Student Affairs Officer, Purdue North Central Campus, Junction U. S. 421 and Indiana Toll Road, Westville, Indiana 46391.

Aid for Current Students

Financial aid in the form of scholarships and loans is available for students already enrolled at the North Central Campus.

STUDENT EMPLOYMENT

Many area industries list their part-time job opportunities with the Student Affairs Office. Students who need a part-time job to help finance their education should register with the student affairs officer.

Students whose families cannot contribute a significant portion of the cost of educational expenses may qualify for the Work-Study Program of the Higher Education Act of 1965.

INSURANCE

Low cost University accident and health insurance similar to the policy offered at the Lafayette campus is offered annually to all students carrying an academic load of eight hours or more. Students may take advantage of the opportunity at the beginning of each semester.

STUDENT ACTIVITIES

Purdue encourages its students to participate in student activities in the belief that membership in an organization not only provides a broader educational base for the individual, but also adds wider experience to his personal assets. Many students find an opportunity to convert classroom theory into practical use in this manner. A number of clubs and organizations are active at the North Central Campus. The clubs are generally self-directed and draw on the faculty for sponsorship and advice. Any registered student is eligible to participate in the activity program.

University Fees

FEES ARE SUBJECT to change by the Board of Trustees without notice. All fees are payable at the time of registration each semester.

Course Fees. For courses numbered 100-499, \$15 per credit hour (non-residents—\$23 per credit hour) plus \$4 per laboratory hour. For courses numbered 500 and above, \$18 per credit hour (nonresidents—\$26 per credit hour) plus \$4 per laboratory hour. This fee schedule may not necessarily apply to special programs.

Costs for two semesters for full-time undergraduate students:

	Indiana	
	Residents	Nonresidents
University fees*	\$550	\$700
Books and supplies	100	100
Total	<hr/> \$650	<hr/> \$800

This total does not include the cost of transportation, housing, and meals which will depend upon an individual's own desires.

* Varies slightly depending upon the courses selected.

Late Registration Fees.

\$5 per course during the first week of classes with a maximum of \$10.

Breakage Fees. Course fees include the cost of normal breakage and wear and tear on equipment. An additional charge will be levied against individuals for excessive waste, loss, or breakage that may occur. Such special charges must be paid before course credit will be given.

Diploma Fees. Students in applied technology must pay a \$5 diploma fee not less than 30 days before the close of the semester in which they expect to complete their work for an associate degree.

Refunds. Course fees will be refunded under any one of the following conditions:

<i>Period of Withdrawal</i>	<i>Refund Percentage</i>	
	<i>Semester</i>	<i>Summer Session</i>
First week	100	100
Second week	60	40
Third week	40	0
Fourth week	20	0
Fifth week	0	0

Deposits on equipment are subject to regular service and breakage charges. Refunds are not transferable from one registration period to another or from one student to another.

To be eligible for a refund, the student must notify in person the registration officer and complete the necessary withdrawal procedures.

Special Examination Fees. To establish credit by examination, a nondegree student or a student currently enrolled carrying less than 12 credit hours must pay a fee of \$25 per course.

Withdrawal. In order to effect a withdrawal from any class, a student must notify his assigned faculty advisor and registration officer at the time of withdrawal. Discontinuance of class attendance is not the basis for withdrawal, and students who do not notify the office when they plan to withdraw will be given a failing grade in each course involved.

Grading

ASSIGNING OF GRADES

INSTRUCTORS WILL ASSIGN each student a grade for each course in which he is enrolled at the close of a session. The student shall be responsible for the completion of all required work by the time of the last scheduled meeting in the course unless his assignment to the course has been properly cancelled. The grade shall indicate the student's achievement with respect to the objectives of the course.

For credit courses:

- A—highest passing grade.
- B
- C

D—lowest passing grade; passing minimal objectives of the course.

E—conditional failure; failure to achieve minimal objectives, but only to such limited extent that credit can be obtained by examination or otherwise without repeating the entire course. This grade represents failure in the course unless and until the record is duly changed within one semester. It cannot be changed to a grade higher than a “D.”

F—failure to achieve minimal objectives of this course. The student must repeat the course satisfactorily in order to establish credit in it.

For zero credit courses (including thesis research but not including laboratory portions of courses in which, for purposes of scheduling, separate course designation and separate class cards are used for the laboratory sections):

S—satisfactory; meets course objectives.

U—unsatisfactory; does not meet course objectives.

For complete work, either credit or noncredit:

O—incomplete; no grade; a temporary record of work which was interrupted by unavoidable absence or other causes beyond a student's control, and which work was passing at the time it was interrupted. An instructor may require the student to secure the recommendation of the student affairs officer that the circumstances warrant a grade of incomplete. On the record a grade of “O” will be equivalent to a “W” unless and until the record is duly changed within one semester or the next semester the course is offered.

Directed grades. The registration officer is directed to record the following grades and symbols under special circumstances:

W—withdrew; a record of the fact that a student was enrolled in a course and withdrew or cancelled the course after the last date for late registration and adding courses.

WF—withdrew failing; a record of course cancellation after the last date for cancelling a course without grade, at which time, according to a statement from the instructor, the student was not passing in his work. This grade counts in all respects as a failing grade.

A grade of “WF” may be directed by the dean of men, the dean of women, or the Committee on Scholastic Delinquency and Readmission when a student is dropped from a course for serious scholastic delinquency.

PASS—NOT PASS

In order to provide students with the opportunity to broaden their educational foundations with minimal concern for grades earned, an alternative grading system, the Pass/Not Pass option, is established.

1. The option is open to all students in the University subject to the regulations of the school in which the student is enrolled. In particular, the school will specify under what conditions a course that is passed under this option may be used to satisfy its graduation requirements.
2. Subject to the regulations of his school, a student may elect this option in any course which does not already appear on his academic record and in which he is otherwise eligible to enroll for credit with letter grade. A student may not elect this option for more than twenty percent of the total credit hours required for his graduation.

3. The registrar's class roster will indicate which students have elected this option.
4. A student who is enrolled in a course under this option has the same obligations as those who are enrolled in the course for credit with letter grade. When the instructor reports final grades in the course, he will report that any such student who would have earned a grade of A, B, or C has passed the course, and that any other such student has not passed. The registrar will make an appropriate notation on the student's academic record in place of a letter grade but will not use the course in computing grade indices. (The notations that are used for this purpose are to be approved by the Educational Policy Committee).

GOOD STANDING

For purposes of reports and communications to other institutions and agencies and in the absence of any further qualification of the term, a student shall be considered in good standing unless he has been dismissed, suspended, or dropped from the University and has not been readmitted.

SCHOLARSHIP INDEXES

The scholarship standing of all regular students enrolled in programs leading to an undergraduate degree shall be determined by two scholarship indexes, the Semester Index and the Graduation Index.

1. The Semester Index is an average determined by weighting each grade received during a given semester by the number of semester hours of credit in the course.
2. The Graduation Index is a weighted average of all grades received by a student while in the curriculum in which he is enrolled plus all other grades received in courses taken in other curricula offered by the University and properly accepted for satisfying the requirements of the curriculum of the school in which the student is enrolled. With the consent of his adviser, a student may repeat a course. In the case of courses which have been repeated or in which conditional grades have been removed by examination or for which a substantially equivalent course has been substituted, the most recent grade received shall be used.
3. For the purpose of averaging, each grade shall be weighted in the following manner:

A	—6 x semester hours = index points
B	—5 x semester hours = index points
C	—4 x semester hours = index points
D	—3 x semester hours = index points
E, F, WF	—2 x semester hours = index points
O, W	not included

GRADUATION INDEX REQUIREMENT

A minimum Graduation Index of 4.00 is required for graduation.

SCHOLASTIC PROBATION

A candidate for the bachelor's or associate degree shall be placed on probation if his semester or graduation index at the end of any semester is

less than that required for a student with his classification as shown in Table A. A student on probation shall be removed from that status at the end of the first subsequent semester in which he achieves semester and graduation indexes equal to or greater than those required for a student with his classification as shown in Table A. Any grade change due to a reporting error will require reconsideration of probation status.

Temporary students who do not achieve academic standing required of regular students may not be permitted to continue in attendance. Probation is concerned only with the regular semesters and not with the summer sessions and intensive courses.

TABLE A. INDEX LEVELS FOR PROBATION

S = Semester Index; G = Graduation Index		
Classification	S	G
1	3.5	3.5
2	3.5	3.5
3	3.6	3.75
4	3.6	3.90
5	3.7	3.95
6	3.7	4.0
7	3.7	4.0
8 and up	3.7	4.0

DROPPING OF STUDENTS FOR SCHOLASTIC DEFICIENCY

A student on scholastic probation shall be dropped from the University if at the close of any semester the semester or graduation index is less than that required of a student with his classification as shown in Table B. This rule shall not apply for the semester in which the student completes all requirements for his degree. A student dropped by this rule and later duly readmitted as a regular student shall be readmitted on probation.

TABLE B. INDEX LEVELS FOR DROPPING

S = Semester Index; G = Graduation Index		
Classification	S	G
1*	3.2	3.2
2	3.3	3.3
3	3.4	3.5
4	3.4	3.6
5	3.5	3.7
6	3.5	3.8
7	3.5	3.85
8 and up	3.5	3.9

DISTINGUISHED STUDENTS

Regular undergraduate students, carrying at least 14 semester hours, who successfully complete all their courses with a grade "C" or higher and obtain a semester scholarship index of 5.50 or better will be designated as distinguished for that semester.

* Affects only students entering on probation.

DEGREES WITH DISTINCTION

Degrees are awarded at the end of each semester and summer session to candidates who have completed the requirements of their schools. At each of these periods degrees with distinction are awarded to those completing the undergraduate plans of study under the following rules:

1. Distinction at graduation shall be awarded on the basis of all course work taken. Baccalaureates with distinction shall be granted only to those who complete the four (or five) year curricula at Purdue and not to those who complete only the first three years at Purdue.

2. A candidate for the baccalaureate with distinction must have earned at least 70 hours of credit at Purdue. A candidate for an associate degree with distinction must have earned at least 45 hours of credit at Purdue.

For any student to qualify for distinction, his scholarship index for all work completed must be at least 5.00.

3. If the number of graduates in any school who qualify for distinction under rules (1) and (2) exceed one-tenth of the total number of graduates from that school and for that semester or summer session, the number of degrees with distinction shall be limited to one-tenth of the class in that school, and those graduates with highest indexes shall be included. In administering this rule all baccalaureate engineering graduates will be considered as one school and all associate degree graduates will be considered as one school.

4. Of those students who qualify for distinction under these rules, the three-tenths of the baccalaureate graduates having the highest indexes shall be designated as graduating with the highest distinction, irrespective of the schools to which they may belong. The three-tenths of the associate degree graduates having the highest indexes will be designated as graduating with highest distinction.

5. No student with a record of faculty discipline shall be included without special approval by the faculty.

Plans of Study

ABBREVIATIONS

A&D—Art and Design	EG—Engineering Graphics	MSA—Materials Science and Metallurgical Engineering
AGR—Agriculture	ENGL—English	MET—Mechanical Engineering Technology
AGRY—Agronomy	ENGR—Engineering Sciences	MTT—Metallurgical Engineering Technology
ANSC—Animal Sciences	ESC—Engineering Sciences	NT—Nursing Technology
ART—Architectural Technology	F&N—Foods and Nutrition	PEMN—Physical Education for Men
BIOL—Biological Sciences	FOR—Forestry and Conservation	PEW—Physical Education for Women
CE—Civil Engineering	FR—French	PHAR—Pharmacy
CES—Civil Engineering Service Courses	GEOS—Geosciences	PHCH—Pharmaceutical Chemistry
CET—Civil Engineering Technology	GER—German	PHIL—Philosophy
CHE—Chemical Engineering	GNT—General Studies, Technology	PHYS—Physics
CHM—Chemistry	GS—General Studies, Humanities	POL—Political Science
CHT—Chemical Engineering Technology	HIST—History	PSY—Psychology
CS—Computer Sciences	IED—Industrial Education	RUSS—Russian
C&T—Clothing and Textiles	IET—Industrial Engineering Technology	SOC—Sociology
CPT—Computer Technology	INDM—Industrial Management	SPAN—Spanish
ECON—Economics	IS—Industrial Supervision	SPE—Speech
ED—Education	MA—Mathematics	STAT—Statistics
EE—Electrical Engineering	ME—Mechanical Engineering	
EET—Electrical Engineering Technology		

School of Agriculture

Training in the professional phases of agriculture provides an opportunity to qualify for challenging and exciting careers. The pressure of population upon world supplies of food and fiber is evident. Modern food production, processing, and marketing are expanding rapidly. The stimulation and control of growth by biological and chemical means present complex problems. The use of natural resources for maximum benefit to society is a compelling necessity

The opportunities for agricultural graduates trained in professional areas are expanding rapidly. In the decades ahead the demand for men and women with scientific training in agriculture will expand more rapidly than the

increase in graduates. Industries related to agriculture need men and women who understand agriculture and are trained in business, communications, production, economics, education, and science.

Training in the School of Agriculture is based upon a solid foundation of mathematics, chemistry, biology, physics, economics, and English. Students are asked to choose an option within agriculture at sophomore level in order to develop a sequence of courses leading to a more clearly defined objective. Each option has substantial opportunities for electives which permit additional specialization in main areas of interest or permit a broad choice in liberal arts or general education.

REQUIRED FRESHMAN YEAR*

First Semester	Second Semester
(0) AGR 101 (Agricultural Lectures)	(4) BIOL 108 (Introduction to Botany)
(4) BIOL 109 (Introduction to Zoology)	(3) CHM 112 (General Chemistry)
(3) CHM 111 (General Chemistry)	(3) MA 153 (Algebra and Trigonometry I)
(3) ENGL 101 (English Composition I)	(3) SPE 114 (Fundamentals of Speech Communication)
(2) Military Training or Elective	(2) Military Training or Elective
(6) Electives*	(3) Elective*
<hr/> (18)	<hr/> (18)

FRESHMAN ELECTIVES

Each student will select from the following group three subjects to be taken in his freshman year. His selections will provide the basis for his choice of optional groups in the sophomore, junior, and senior years. He should discuss his electives with the agricultural advisers at registration.

(3) AGRY 105 (Crop Production)	(3) AGECE 100 (Introductory Agricultural Business and Economics)
(3) ANSC 102 (Introduction to Animal Agriculture)	(3) HORT 102 (Fundamentals of Horticulture)
(3) BCHM 100 (Introduction to Biochemistry)	

AGRICULTURAL ENGINEERING

See Freshman Engineering Programs.

PREVETERINARY CURRICULUM

An organized four-semester preveterinary curriculum, closely approximating the requirements listed in the catalog of the School of Agriculture, is available at the North Central Campus. This program is designed to qualify the student for admission to the School of Veterinary Science and Medicine. However, if the student is not admitted or does not wish to enter the School of Veterinary Science and Medicine, the curriculum provides a strong program in the bio-

* There are slight variations in academic program for students following programs in agricultural science, biochemistry, food technology, and forestry and conservation.

logical and physical sciences, which may be used as a basis for continued training in the School of Agriculture should the Bachelor of Science in Agriculture degree be desired.

FRESHMAN YEAR

First Semester	Second Semester
(4) CHM 109* (General Chemistry)	(4) CHM 110* (General Chemistry with Qualitative Analysis)
(3) ENGL 101 (English Composition I)	(4) BIOL 108 (Introduction to Botany)
(3) MA 153 (Algebra and Trigonometry I)	(3) ENGL 102 (English Composition II)
(0) AGR 101 (Agricultural Lectures)	(3) MA 154 (Algebra and Trigonometry II)
(3) AGR Elective	(2) Military Training or Elective
(2) Military Training or Elective	(3) Elective†
(3) Elective†	
(18)	(19)

SOPHOMORE YEAR

Third Semester	Fourth Semester
(3) ANSC 221 (Introductory Animal Nutrition)	(3) AGRY 430 (Genetics)
(4) BIOL 109 (Introduction to Zoology)	(1) AGRY 430L (Genetics Laboratory)
(4) CHM 255 (Organic Chemistry)	(4) PHYS 221 (General Physics)
(1) CHM 255L (Organic Chemistry Laboratory)	(3) SPE 114 (Fundamentals of Speech Communication)
(4) PHYS 220 (General Physics)	(2) Military Training or Elective
(2) Military Training or Elective	(3) Elective
(18)	(16)

Schools of Engineering

UNDERGRADUATE INSTRUCTION in engineering, agricultural engineering, chemical engineering, civil engineering, electrical engineering, engineering sciences, industrial engineering, materials science and metallurgical engineering, and mechanical engineering leads to the degree of Bachelor of Science. In order to give the student sufficient time to adjust himself and to choose the branch of engineering for which he is best adapted, the following program of study during the freshman year is common for all engineering curricula. Only those students with adequate background training will be expected to accomplish this in two semesters. Students with inadequate preparation, particularly in mathematics and chemistry, may require an additional semester or summer session to attain sophomore standing.

* On the basis of orientation scores, CHM 111-112 (6 cr.) may be taken if at least 7 cr. of chemistry are taken in the sophomore year.

† Elect a minimum of 9 cr. during the preveterinary curriculum from the fields of psychology, sociology, history, political science, agricultural economics, philosophy, foreign languages, religion, and literature.

GENERAL EDUCATION PROGRAM

All engineering students are required to take a minimum of 24 credit hours of general education courses. These hours are distributed as indicated below.

- 1. Six credit hours in communications are required in the freshman engineering program. These are ENGL 101 or 103 and SPE 114.
- 2. The remaining 18 credit hours must be selected from two groups of course sequences, the first group being in the social sciences and the second group being in fine arts and humanities.
- 3. Each student must select one 12-hour sequence and one 6-hour sequence. No student may elect a 6-hour sequence from the same group from which he chose a 12-hour sequence.

GROUP I

- 12-hour sequences*
- Sociology and/or Psychology
- Economics
- Foreign Language and Culture
- Political Science

- 6-hour sequences*
- List same as above.

GROUP II

- 12 hour sequences*
- Creative Arts
- General Studies
- Literature
- Speech and/or Theatre
- Independent Reading
- History
- Philosophy

- 6-hour sequences*
- Same as above except General Studies

The above sequences are set up to give depth to the various programs in the social sciences, fine arts, and humanities. A pamphlet stating the objectives of the program in general education is available from the academic counselors.

FRESHMAN ENGINEERING

Program A: Students fully qualified upon entrance.

First Semester

- (4) CHM 115 (General Chemistry)
 - (5) MA 161 (Mathematics for Engineering and the Physical Sciences I)
 - (3) SPE 114 (Fundamentals of Speech Communication) or ENGL 101 (English Composition I)
 - (4) EG 118 (Engineering Graphics)
 - (3) General Elective
-
- (19)

Second Semester

- (4) CHM 116 (General Chemistry)
 - (5) MA 162 (Mathematics for Engineering and the Physical Sciences II)
 - (3) ENGL 101 (English Composition I) or SPE 114 (Fundamentals of Speech Communication)
 - (4) PHYS 152 (Mechanics and Sound)
 - (3) General Elective
-
- (19)

Program B: Students below average preparation in mathematics.

First Semester	Second Semester
(4) CHM 115 (General Chemistry)	(4) CHM 116 (General Chemistry)
(5) MA 151 (Elementary Mathematics for Engineering and the Physical Sciences)	(5) MA 161 (Mathematics for Engineering and the Physical Sciences I)
(3) ENGL 101 (English Composition I) or SPE 114 (Fundamentals of Speech Communication)	(3) SPE 114 (Fundamentals of Speech Communication) or ENGL 101 (English Composition I)
(4) EG 118 (Engineering Graphics)	(6) General Electives
<hr/> (16)	<hr/> (18)

Program C: Students with below average preparation in chemistry.

First Semester	Second Semester
(3) CHM 111 (General Chemistry)	(3) CHM 112 (General Chemistry)
(5) MA 161 (Mathematics for Engineering and the Physical Sciences I)	(5) MA 162 (Mathematics for Engineering and the Physical Sciences II)
(3) SPE 114 (Fundamentals of Speech Communication) or ENGL 101 (English Composition I)	(3) ENGL 101 (English Composition I) or SPE 114 (Fundamentals of Speech Communication)
(4) EG 118 (Engineering Graphics)	(4) PHYS 152 (Mechanics and Sound)
<hr/> (15)	(3) General Elective <hr/> (18)

Program D: Students with below average preparation in chemistry and mathematics.

First Semester	Second Semester
(3) CHM 111 (General Chemistry)	(3) CHM 112 (General Chemistry)
(5) MA 151 (Elementary Mathematics for Engineering and the Physical Sciences)	(5) MA 161 (Mathematics for Engineering and the Physical Sciences I)
(3) ENGL 101 (English Composition I) or SPE 114 (Fundamentals of Speech Communication)	(3) SPE 114 (Fundamentals of Speech Communication) or ENGL 101 (English Composition I)
(4) EG 118 (Engineering Graphics)	(6) General Electives
<hr/> (15)	<hr/> (17)

School of Home Economics

THE PLAN OF STUDY in home economics is designed to prepare young men and women for professional work in the various areas of the field and at the same time to provide a broad general education which prepares the student to meet the needs for home and community living.

Areas of concentration include clothing and textiles, foods and nutrition, food management, foods in business, food research, home economics extension, housing, and vocational home economics teaching.

Students interested in preparation for work in the fields mentioned above should enroll in the curriculum listed below.

FRESHMAN YEAR

First Semester	Second Semester
(3) ENGL 101 (English Composition I) or ENGL 103 (Composition and Literature)	(3) ENGL 102 (English Composition II)
(3) CHM 111 (General Chemistry)	(3) CHM 112 (General Chemistry)
(3) SOC 100 (Introductory Sociology)	(3) ENGL 240 (English Literature)
(3) SPE 114 (Fundamentals of Speech Communication)	(3) PSY 120 (Elementary Psychology)
(3) Mathematics	(3) ECON 210 (Principles of Economics)
<hr/> (15)	<hr/> (15)

School of Humanities, Social Science, and Education

REQUIREMENTS FOR GRADUATION

THE REQUIREMENTS FOR the baccalaureate degree are listed in the *General Information Bulletin* of the University. One of these requirements is the certification by the dean of the appropriate school that the student has completed his plan of study.

Attainment of the objectives of the School of Humanities, Social Science, and Education is sought in two ways. One is through the specialized knowledge a student acquires as he majors or minors in one or more of the subjects offered by the departments in the school. The other is through the opportunity to gain skill and knowledge in other areas of learning through a combination of requirements and free electives.

DEGREES OFFERED

Three bachelor's degrees are offered in the School of Humanities, Social Science, and Education: Bachelor of Arts, Bachelor of Science, and the Bachelor of Physical Education (for men only).

The program leading to the degree of Bachelor of Arts is followed by students majoring in any of the fields of the humanities or the social sciences, in physical education for women, or in high school teaching in any of these fields. The program leading to the degree of Bachelor of Science is followed by

students majoring in audiology and speech sciences and those majoring in psychology. The program leading to the degree of Bachelor of Physical Education is followed by men students preparing for coaching and teaching, for admission to a school of physical therapy, or for athletic training.

BACHELOR OF ARTS OR BACHELOR OF SCIENCE

The Plan of Study for the Bachelor of Arts and the Bachelor of Science degrees in the School of Humanities, Social Science, and Education consists of (1) the general education requirements; (2) the requirements for the major (or "area" or "concentration"); and (3)—for students who enter Purdue University after May 31, 1969—a sufficient number of elective courses to bring the total credits to 120. All credits must have been earned within the ten years preceding the date of graduation.

GENERAL EDUCATION REQUIREMENTS

New general education requirements become effective for students who enter Purdue University after May 31, 1969. These requirements specify a minimum involvement in several areas. They have been established in order to insure that each student has the opportunity to acquire skill in the oral and written use of his own language, in at least one other modern language, and in mathematics, and that he has had a significant experience in the field of science, in the arts, in the humanities, and in the social sciences.

The General Education requirements for the B.A., and the B.S. degrees:

English Composition	0, 3 or 4 hours
Speech Communication	0 or 3 hours
Foreign Language	0, 3, 6, or 12 hours
Mathematics or Logic	0, 3 or 6 hours
Freshman Issues	3 hours
Humanities (any approved courses in history, literature, aesthetics, and philosophy other than logic, no more than six hours may be selected from any one area)	12 hours
Social Science (any approved courses in economics, politi- cal science, psychology, sociology, anthropology)	6 hours
Natural Science (a six-hour set of courses in biology, chemistry, physics, or geoscience	6 hours

Maximum hours required for general education .. 52 hours

N.B.—With appropriate evidence of proficiency, a student may be excused from all or a part of the requirements in English Composition, Speech Communication, Foreign Language, and Mathematics or Logic. Thus, if the student shows maximum proficiency in all four fields, it is possible for him to satisfy the requirements with as few as 27 hours (the last four items of the list above). The remaining hours are then available to him as electives.

CONCENTRATION REQUIREMENTS

There are three patterns of concentration: (1) the *area* (maximum of 45 hours, of which at least 12 are in courses outside the major department); (2) the *concentration* (36 to 45 hours); and (3) the *major* (24 to 35 hours). Each department specifies whether its major must be accompanied by a minor. This

major, concentration, or area provides the depth necessary for admission to a graduate school, to meet teacher certification requirements, or for a well-rounded liberal education.

Each student must file his choice of major, area, or concentration at the office of the dean, not later than the end of the third semester. He may subsequently change his major, with permission of the dean.

B. A. and B.S. Degrees

AREAS, CONCENTRATIONS, AND MAJORS

AUDIOLOGY AND SPEECH SCIENCES

Audiology and Speech Sciences
Speech and Hearing Therapy

CHILD DEVELOPMENT AND FAMILY LIFE

Human Development

CREATIVE ARTS

Advertising Design
Art History
Fine Arts
Interior Design
Music History
Theater

ENGLISH

American Literature
Creative Writing
English Honors
English Literature
Journalism

FOREIGN LANGUAGE

French
German
Russian
Spanish

HISTORY

American Civilization
American History
European History

LIBRARY SCIENCE

PHILOSOPHY

PHYSICAL EDUCATION, HEALTH, AND RECREATION

Health and Safety
Physical Education (Women)
Research
Recreation

POLITICAL SCIENCE

Comparative Government
International Relations
Political Science
Political Theory

PRE-LAW

PSYCHOLOGY

SOCIOLOGY

Anthropology
Sociology

SPEECH

Radio-Television
Speech Communication
General Speech

MINORS

Anthropology
Audiology and Speech Sciences
Economics
French
German
Health and Safety
History
Journalism
Library Science
Literature
Mathematics
Music History and Theory

Philosophy
Political Science
Psychology
Radio and Television
Recreation
Russian
Sociology
Spanish
Speech Communication
Speech Communication, History of
Speech, General
Theatre

PROGRAMS FOR TEACHER CERTIFICATION

Teaching Area Majors

Arts and Crafts

Physical Education and Health
(Women)

Teaching Majors

Arts and Crafts

Health and Safety

Elementary Education

Physical Education and Health
(Women)

Foreign Language

Library

Recreation

Nursery-Kindergarten

School Library and Audiovisual
Services

Physical Education (Men)

Special Education (Teaching the
Mentally Retarded)

Social Studies—two of:

English Honors

Economics

English

Government

Foreign Language

Sociology

French

U. S. History

German

World History

Russian

Speech

Spanish

Speech and Hearing Therapy

Teaching Minors

Arts and Crafts

Physics

Biology

Psychology

Chemistry

Recreation

English

School Library and Audiovisual
Services

Foreign Language

Social Studies—one of:

French

Economics

German

Government

Russian

Sociology

Spanish

U. S. History

General Science

World History

Health and Safety

Speech

Mathematics

Physical Education (Men)

Physical Education (Women)

In teacher preparation, Purdue University has been accredited by the National Commission on Accreditation of Teacher Education by the North Central Association of Secondary Schools and Colleges, and by the Indiana State Department of Public Instruction. Detailed requirements for any of the areas, majors, or minors may be obtained from the student counseling office of the school. A student who has an educational objective not covered in the list of areas, majors, or minors should consult the director of counseling.

Each student's program for the four years will be based on one of several plans of study, appropriately modified to fit his concentration requirements and his exemptions, i.e., proficiency in modern language; ENGL 103, etc.

Students who plan to teach in high school will use the plan of study for the major subject-matter field of the teaching certificate for which they expect to qualify.

ELEMENTARY EDUCATION

Preparation in elementary education is offered to a limited number of students chosen on the basis of above-average scholarship, leadership qualities, good mental and physical health, and positive attitude toward children and teaching as a profession. In addition to the core program of all students and the professional program in elementary education the student will have 24 semester hours for a major in the field of his choice.

BACHELOR OF PHYSICAL EDUCATION

The plan of study for the degree of Bachelor of Physical Education, for men only, consists of:

1. Completion of the curriculum requirements for one of the four options in physical education, and
2. The completion of at least 138 hours of credit within the ten years preceding the date of graduation.

At the end of the common freshman year, the student chooses one of the following four options:

Option A: Coaching and Teaching. Designed for those who wish to become athletic coaches and teachers of health and physical education. In addition to certification in health and physical education, it is highly desirable to qualify for at least one other teaching subject. This second subject may be chosen from biology, chemistry, English, history, a modern language, mathematics, physics, shop, and speech.

Option B: Nonteaching Major. A special non-teacher-preparation program to be arranged with an adviser. It has the same over-all requirements as Option A.

Option C: Pre-Physical Therapy. The techniques of remedial or therapeutic practices in physical education. It is intended to prepare the student for admission to a school of physical therapy.

Option D: Athletic Training. For those who wish to become athletic trainers. Requires special counseling.

School of Industrial Management

INDUSTRIAL MANAGEMENT

AS MODERN SOCIETY makes increasing use of technology, managers must keep informed to handle their own jobs effectively and to be able to understand and cooperate with the technical specialist. The industrial management curriculum, by including a required technical sequence, enables the student to take advantage of Purdue's excellent resources in science and technology. Through the technical option, students are provided an opportunity to acquire a basic understanding of a specific area in the field of science and technology.

Such an objective is essential if the individual is to be capable of working effectively with engineers and scientists in a technically-based industry.

Included in the curriculum is a concentration of mathematics and quantitative methods courses designed to provide the necessary training and background in the use of rigorous analytic techniques applicable to management decisions. This program is designed to help the student develop this kind of broad understanding of the management process.

An administrator cannot be made in the short span of a few months or a year. Indeed, most individuals require years of experience to develop the skills, insights, and maturity of judgment which distinguish an effective manager. However, a professional management curriculum can give the student an effective start in his development as a manager. In brief, it can help him become a more useful member of his organization early in his career, and it can aid him in learning and growing more rapidly in positions of increasing responsibility.

ECONOMICS

In contrast to the technically-based internal approach utilized in the management program, the economics curriculum provides a coordinated series of courses in the field of economics and business as a means of developing a broad fundamental background in business organizations and the economic environment in which a business operates. The program includes four two-semester sequences covering economic principles, aggregate economics, statistics, and accounting, plus courses in business law and managerial economics. In addition, three related courses in economics and business, of special interest to the student, make possible a degree of specialization. Elective hours permit either further concentration in economics or enrichment in the general education area.

Business leaders, employment officials, and schools for advanced study, such as law schools, have endorsed this type of economics and business education with liberal arts background. The program satisfies the need of future junior business executives for a broad, liberal-arts-oriented base on which to build specific training and experience received on the job.

INDUSTRIAL MANAGEMENT

FRESHMAN YEAR

First Semester	Second Semester
(4) CHM 115 (General Chemistry)	(4) CHM 116 (General Chemistry)
(5) MA 161 (Mathematics for Engineering and the Physical Sciences I)	(5) MA 162 (Mathematics for Engineering and the Physical Sciences II)
(3) ENGL 101 (English Composition I)	(3) SPE 114 (Fundamentals of Speech Communication)
(3) POL 101 (Introduction to Government)	(3) ENGL 102 (English Composition II)
(1) INDM 100 (Management Lectures)	(1) ENGL 185 (Developmental Reading)
(3) Electives	
(19)	(16)

ECONOMICS (OPTION)

FRESHMAN YEAR

First Semester	Second Semester
(3) ENGL 101 (English Composition I)	(3) ENGL 102 (English Composition II)
(3) MA 153 (Algebra and Trigonometry I)*	(3) MA 154 (Algebra and Trigonometry II)*
(3) HIST 251 (American History to 1865) or HIST 200 (Early Civilization) or HIST 252 (The United States and Its Place in World Affairs)	(3) Lab Science Elective†
(3) Lab Science Elective†	(3) Cultural Sequence II‡
(3) Cultural Sequence‡	(3) Social Science Elective
(3) Elective	(3) Elective
(18)	(18)

SOPHOMORE YEAR

Third Semester	Fourth Semester
(3) INDM 200 (Basic Accounting)	(3) INDM 202 (Financial Accounting)
(3) ECON 210 (Principles of Economics I)	(3) ECON 212 (Principles of Economics II)
(3) SPE 114 (Fundamentals of Speech Communication)	(3) SOC 100 (Introductory Sociology) or
(3) MA 213 (Finite Mathematics I)	(3) PSY 120 (Elementary Psychology)
(3) Cultural Sequence III	(3) MA 214 (Finite Mathematics II)
(3) Elective	(3) Cultural Sequence IV
	(3) Elective
(18)	(18)

School of Science

THE SCHOOL OF SCIENCE consists of the Department of Biological Sciences, the Department of Chemistry, the Department of Geosciences, the Department of Physics, and the Division of Mathematical Sciences.

Curricula leading to two degrees, Bachelor of Science and Bachelor of Science in Chemistry, are offered by the School of Science. Specific details of these curricula and the requirements for the degrees are listed in the School of Science catalog.

The School of Science offers training to selected students who wish to prepare themselves to teach in the fields of biology, chemistry, mathematics, physics, or in certain combinations of these fields.

* A higher level course may be taken, depending on student's mathematics background.
† Completion of two semester sequence (six hours minimum) in one of the following: biology, chemistry, geoscience, or physics.
‡ Completion of an approved four-course sequence in one of the following areas: modern language, philosophy, political science, world history, or world literature.

BACHELOR OF SCIENCE DEGREE

General Education Requirements

The following general requirements for the B.S. degree in the School of Science are supplemented by requirements of the department of the student's major. Particular attention is drawn to modifications allowed in the curricula for prospective high school teachers (as indicated below).

- 1. A total of 124 semester hours, plus physical education or military science as specified by the University.
- 2. English composition: ENGL 101 and 102, or ENGL 103 entered by achievement examination and completed with a grade of C or better.
- 3. Modern foreign language: Pass a fourth-semester college-level course in a modern foreign language, or pass an equivalent proficiency examination. In high school teacher curricula, the student must pass a second-semester college-level course in a modern foreign language or pass a proficiency examination.
- 4. Humanities, social science, and behavioral sciences: The minimum requirement is 18 hours, but it is strongly recommended that the student take more than a minimal program. Six hours must be chosen from each of two of the following areas: (a) literature, philosophy; (b) history, political science; and (c) economics, sociology, psychology. In addition, a satisfactory two-course sequence must be chosen from one of the above areas.
- 5. Mathematics: At least 11 hours.
- 6. Science: Each student must take at least four courses in laboratory science (biology, chemistry, geology, physics) *outside his major area*. It is preferable that he take two-course sequences in each of two sciences; in no case shall he satisfy this requirement by courses drawn from more than two sciences.

BIOLOGICAL SCIENCES, PREMEDICINE,
PREIDENTISTRY, AND MEDICAL TECHNOLOGY

FRESHMAN YEAR

First Semester	Second Semester
(4) BIOL 109 (Introduction to Zoology)	(4) BIOL 108 (Introduction to Botany)
(4) CHM 115 (General Chemistry)	(4) CHM 116 (General Chemistry)
(3) ENGL 101 (English Composition I)	(3) SPE 114 (Fundamentals of Speech Communication)
(3) MA 153 (Algebra and Trigonometry I)	(3) MA 154 (Algebra and Trigonometry II)
(3) Modern Language*	(3) Modern Language
(3) Elective	(3) Elective
(20)	(20)

* German or Russian is recommended.

CHEMISTRY

FRESHMAN YEAR

First Semester		Second Semester	
(5)	CHM 117 (Advanced General Chemistry)	(5)	CHM 126 (Advanced General Chemistry with Qualitative Analysis)
(5)	MA 161 (Mathematics for Engineering and the Physical Sciences I)	(5)	MA 162 (Mathematics for Engineering and the Physical Sciences II)
(3)	ENGL 101 (English Composition I)	(3)	ENGL 102 (English Composition II)
(3)	GER 101 (First Course in German)	(3)	GER 102 (Second Course in German)
<hr/>		<hr/>	
(16)		(16)	

SOPHOMORE YEAR

First Semester		Second Semester	
(3)	CHM 261 (Organic Chemistry)	(3)	CHM 262 (Organic Chemistry)
(2)	CHM 265L (Organic Chemistry Laboratory)	(2)	CHM 266L (Organic Chemistry Laboratory)
(4)	MA 261 (Mathematics for Engineering and the Physical Sciences III)	(4)	MA 262 (Mathematics for Engineering and the Physical Sciences IV)
(4)	PHYS 152 (Mechanics and Sound)	(5)	PHYS 251 (Heat, Electricity, and Optics)
(3)	GER 203 (Third Course in German)	(3)	GER 244 (Fourth Course in Scientific German)
<hr/>		<hr/>	
(16)		(17)	

MATHEMATICS

FRESHMAN YEAR

First Semester		Second Semester	
(5)	MA 161 (Mathematics for Engineering and the Physical Sciences I)	(5)	MA 162 (Mathematics for Engineering and the Physical Sciences II)
(3)	ENGL 101 (English Composition)	(3)	SPE 114 (Fundamentals of Speech Communication)
(3)	Modern Language (German preferred)	(3)	Modern Language
(4)	Science Elective	(4)	Science Elective
(3)	Elective	(3)	Elective
<hr/>		<hr/>	
(18)		(18)	

SOPHOMORE YEAR

First Semester		Second Semester	
(4)	MA 261 (Mathematics for Engineering and the Physical Sciences III)	(3)	MA 351 (Elementary Linear Algebra)
(3)	Modern Language	(3)	Modern Language
(4)	Science Elective	(4)	Science Elective
(6)	Humanities Electives	(6)	Humanities Electives
<hr/>		<hr/>	
(17)		(16)	

PHYSICS

FRESHMAN YEAR

First Semester	Second Semester
(3) ENGL 101 (English Composition I)	(4) CHM 116 (General Chemistry)
(4) CHM 115 (General Chemistry)	(5) MA 162 (Mathematics for Engineering and the Physical Sciences II)
(5) MA 161 (Mathematics for Engineering and the Physical Sciences I)	(4) PHYS 152 (Mechanics and Sound)
(1) ENGL 185 (Developmental Reading)	(3) Modern Language
(3) Modern Language	
(16)	(16)

PREPHARMACY

The Purdue School of Pharmacy and Pharmacal Sciences does not admit students directly from high school. Students wishing to prepare for the profession of pharmacy register in the School of Science for the prepharmacy program and apply for transfer to the School of Pharmacy and Pharmacal Sciences at the end of the freshman year. Application for the transfer should be filed with the dean of the Pharmacy School or with the pharmacy adviser before April 1. Students who, for any reason, do not transfer to the School of Pharmacy and Pharmacal Sciences may apply for transfer to any other school of the University or may remain in the School of Science with a change of educational objective.

PRE-PHARMACY YEAR

First Semester	Second Semester
(3) MA 153 (Algebra and Trigonometry I)	(3) MA 154 (Algebra and Trigonometry II)
(4) CHM 109 (General Chemistry)	(4) CHM 110 (Qualitative Analysis)
(3) ENGL 101 (English Composition I)	(3) ENGL 102 (English Composition II)
(3) SPE 114 (Fundamentals of Speech Communication)	(1) PHAR 101 (Orientation)
(1) PHAR 100 (Orientation)	(3) Elective
(2-3) Elective, Physical Education or Military Training	(2-3) Elective, Physical Education or Military Training
(16-17)	(16-17)

SECOND YEAR

Third Semester	Fourth Semester
(3) BIOL 103 (Principles of Biology)	(3) BIOL 104 (Principles of Biology)
(4) MDCH 204 (Organic Chemistry)	(4) MDCH 205 (Organic Chemistry)
(4) PHYS 220 (General Physics)	(4) PHYS 221 (General Physics)
(1) PHAR 260 (Calculations)	(5-6) Electives
(3-4) Electives	
(15-16)	(16-17)

ELECTIVES: Fifteen credit hours must be selected from two general areas of study: (1) humanities and (2) social studies and behavioral sciences. A minimum of six credit hours must be taken in each area. The 15 elective credit hours must be completed during the first six semesters. ECON 210 shall be counted toward the satisfaction of this requirement. Departments and courses which will meet the requirement for these restricted elective are the following:

Humanities	Social Studies and Behavioral Sciences
English (all courses numbered 200 and above)	Economics (all courses)
Modern Languages (all courses)	History (all courses)
Philosophy (all courses)	Political Science (all courses)
Speech (all courses numbered 160 and above)	Sociology (all courses)

CHM 115 and 116 may replace CHM 109 and 110.

CHM 255, 255L, 256 and 256L may replace MDCH 204 and 205. PHAR 100, 101 and 260 may be postponed until the student transfers to the Lafayette campus.

School of Technology

DIVISION OF APPLIED SCIENCE

THE UNIVERSITY has a number of two-year undergraduate programs leading to the degree of Associate in Applied Science.

The associate degree is awarded to each student who satisfactorily completes the program of study in one of the curricula. Graduates can expect to be immediately employable in industry. Those who have received the associate degree may be admitted to the two-year curricula designed to lead to a Bachelor of Science degree for engineering technicians, or Bachelor of Science in Industrial Education.

The Nature of Applied Science

Scientific and technological complexity ranges over a very broad spectrum, extending all the way from extremely simple activity to highly complex and abstract activity. At one extreme are the pure scientist and the engineering scientist; at the other, the mechanic, the craftsman, and the service personnel.

The Engineer. The 33rd Annual Report of the Engineering Council for Professional Development, Sept. 30, 1965, defines engineering as "the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind."

The Engineering Technician. The National Society for Professional Engineers has approved this definition of the engineering technician provided by the Board of the Institute for the Certification of Engineering Technicians:

"An engineering technician is one who, in support of and under the direction of professional engineers or scientists, can carry out in a responsible manner either proven techniques which are common knowledge among those who are technically expert in a particular technology, or those techniques especially prescribed by professional engineers.

"Performance as an engineering technician requires the application of principles, methods, and techniques appropriate to a field of technology, combined with practical knowledge of the construction, application, properties, operation, and limitations of engineering systems, processes, structures, machinery, devices, or materials, and, as required, related manual crafts, instrumental, mathematical, or graphic skills.

"Under professional direction an engineering technician analyzes and solves technological problems, prepares formal reports on experiments, tests, and other similar projects or carries out functions such as drafting, surveying, technical sales, advising consumers, technical writing, teaching or training. An engineering technician need not have an education equivalent in type, scope, and rigor to that required of an engineer; however, he must have a more theoretical education with greater mathematical depth, and experience over a broader field than is required of skilled craftsmen who often work under supervision."

The Skilled Craftsman. The work of the engineer and the technician would be meaningless without the contribution of the skilled craftsman who carries out engineering ideas. A toolmaker, for example, fabricates a jig or die from a design conceived by the engineer and detailed by the technician. The electrician, pipefitter, welder, machinist, chemical operator, and surveyor's rodman likewise use their skills to carry out the work of the engineering team.

Need. Our present space age, with its exploding accumulation of new information and scientific discovery, has increased the need for people with specialized training in science and technology. Experts have recently estimated that our nation's engineering schools must graduate twice the present 35,000 engineers per year if we are to meet the expanding needs.

Since it now appears improbable that our nation will be able to attain the goal of 70,000 to 80,000 engineers per year another approach to the problem is necessary. The most reasonable solution appears to be one of making the present professional engineer more efficient by providing him with assistance in the form of an engineering technician. Many experts believe there should be a ratio of from three to five engineering technicians for each engineer. This would indicate that 100,000 to 150,000 engineering technicians should be trained per year.

Currently the United States has only about 16,000 graduates of engineering technology programs coming on the job market each year. This simply means there is a large, unsatisfied demand for engineering technicians. The opportunities in this field are virtually unlimited.

Developed With Industrial Cooperation

Various courses are offered to cover the basic knowledge and practices of present-day industry. Industrial leaders have been consulted to learn the kind of specific technical information required by persons who take jobs in industry. Many members of the instructional staff are drawn from local industries, but course administration, teaching material, and standards of instruction are under the direction of the departments involved.

ARCHITECTURAL TECHNOLOGY

This curriculum is designed to prepare students for technological employment with contractors, building materials suppliers, architects, civil engineers, and related governmental agencies.

Emphasis is placed on construction materials and processes, specifications, regulations, estimating, surveying, frame and masonry construction, and architectural and structural drafting, as well as on related courses in mathematics and physical science.

Also included are courses dealing with some of the historical, economic, and human relations aspects related to the individual in our American industrial life.

Graduates are prepared to accept positions as estimators, expeditors, planning technicians, field inspectors, architectural detailers, architectural draftsmen, and sales representatives. With experience, after completing this program of study, graduates are now holding positions as field engineers, technical engineers, junior structural engineers, engineering assistants, shop superintendents, and real estate brokers.

Graduates may also continue their education by pursuing a Bachelor of Science degree with a major in construction technology.

FRESHMAN YEAR

First Semester		Second Semester	
(2)	ART 118 (Architectural Projections)	(2)	ART 121 (Freehand Drawing II)
(2)	ART 120 (Freehand Drawing I)	(3)	ART 150 (Architectural Construction I)
(2)	ART 172 (Systems of Construction)	(2)	ART 164 (Building Materials)
(3)	CET 104 (Elementary Surveying)	(3)	CET 160 (Statics)
(5)	MA 151A (Elementary Mathematics for Engineering and the Physical Sciences)	(4)	GNT 136 (Physics: Mechanics and Heat)
(3)	SOC 100 (Introductory Sociology)	(3)	ENGL 101 (English Composition I)
<hr/> (17)		<hr/> (17)	

SOPHOMORE YEAR

Third Semester		Fourth Semester	
(3)	ART 222 (Architectural Construction II)	(3)	ART 210 (History of Architecture)
(2)	ART 276 (Specifications and Contract Documents)	(3)	ART 224 (Architectural Construction III)
(3)	ART 284 (Mechanical Equipment for Buildings)	(3)	ART 280 (Quantity Survey)
(3)	CET 260 (Strength of Materials)	(3)	CET 266 (Materials Testing)
(4)	GNT 176 (Physics: Electricity, Sound, and Light)	(3)	IS 268 (Elements of Law)
(3)	SPE 114 (Fundamentals of Speech Communication)	(3)	GNT 220 (Technical Report Writing)
<hr/> (18)		<hr/> (18)	

COMPUTER TECHNOLOGY

This two-year associate degree program is designed to produce a graduate in the occupational range between a computer programmer and a systems analyst, but closer to the former, either in commercial areas or in scientific areas depending upon which of the two options is selected. This curriculum is designed to prepare a person to perform the following functions: analyze

problems, design flowcharts and computer programs, verify programs, evaluate and modify existing programs, and be familiar with common commercial and business procedures or with common scientific and engineering procedures.

Commercial Option

FRESHMAN YEAR

First Semester	Second Semester
(3) CPT 101 (Introduction to Computers)	(3) CPT 122 (Computer Math)
(3) CPT 111 (Unit Record Data Processing)	(3) CPT 131 (Assembly Language Programming I)
(1) ENGL 185 (Developmental Reading)	(3) ENGL 101 (English Composition I)
(5) MA 151A (Elementary Mathematics for Engineering and the Physical Sciences)	(3) IET 104 (Industrial Organization)
(3) SPE 114 (Fundamentals of Speech Communication)	(3) INDM 200 (Introductory Accounting)
<hr/>	<hr/>
(15)	(15)

SOPHOMORE YEAR

Third Semester	Fourth Semester
(3) CPT 132 (Assembly Language Programming II)	(3) CPT 265 (Compiler Programming II)
(3) CPT 225 (Statistical Methods)	(3) CPT 284 (Utility Programs)
(3) CPT 254 (Commercial Systems Applications)	or
(3) CPT 264 (Compiler Language Programming I)	(3) CPT 286 (Computer Operating Systems I)
(3) INDM 201 (Cost Accounting)	(1) CPT 294 (Computer Seminar and Field Trips)
(3) Elective	(3) ECON 210 (Principles of Economics)
	(3) GNT 220 (Technical Report Writing)
	(3) Elective
<hr/>	<hr/>
(18)	(16)

Technical Option

FRESHMAN YEAR

First Semester	Second Semester
(3) CPT 101 (Introduction to Computers)	(3) CPT 122 (Computer Math)
(3) CPT 111 (Unit Record Data Processing)	(3) CPT 131 (Assembly Language Programming I)
(1) ENGL 185 (Developmental Reading)	(3) ENGL 101 (English Composition I)
(5) MA 151A (Elementary Mathematics for Engineering and Physical Sciences)	(3) IET 104 (Industrial Organization)
(3) SPE 114 (Fundamentals of Speech Communication)	(4) PHYS 220 (General Physics)
<hr/>	<hr/>
(15)	(16)

SOPHOMORE YEAR

Third Semester		Fourth Semester	
(3)	CPT 132 (Assembly Language Programming II)	(3)	CPT 220 (Numerical Methods I)
(3)	CPT 225 (Statistical Methods)	(1)	CPT 294 (Computer Seminar and Field Trips)
(3)	CPT 264 (Compiler Language Programming I)	(3)	ECON 210 (Principles of Economics)
(3)	MA 223A (Introductory Analysis I)	(3)	GNT 220 (Technical Report Writing)
(4)	PHYS 221 (General Physics)	(3)	MA 224A (Introductory Analysis II)
(3)	Electives	(3)	Elective
<hr/>		<hr/>	
(19)		(16)	

ELECTRICAL ENGINEERING TECHNOLOGY

The electrical engineering technology program is a combination of courses in electrical engineering technology, mathematics, science, and general academic subjects that lead to the degree of Associate in Applied Science. The program is designed to prepare students for employment as electronic technicians in research laboratories, electronic industries, and in any industry that uses electrical power or electronic controls.

The basic curriculum will provide the student with sufficient education to find employment in the fields of communications electronics, industrial electronics, microwaves, military electronics, computer electronics, automation, electronic servicing, television, electrical power, aviation electronics, and others. Specialization in these areas is provided by technical elective courses in the second year of the program.

The duties of the electronic technician could be: construction, testing, and troubleshooting of experimental circuits in research laboratories; installation, maintenance, troubleshooting, operation, and testing of electrical and electronic equipment in industries; sales and service of electronic equipment, etc.

Electronic technicians have the following job classifications: research or laboratory technician, electronics engineering technician, engineering development technician, product design technician, systems test technician, field service technician, production technician, maintenance technician, instrument technician, inspectors, electronic specialist, radio operator, and many others.

After experience and continued technical growth, graduates hold such positions as junior engineer, sales engineer, field engineer, customer service engineer, applications engineer, supervisor, manager, foreman, contractor, electrical estimator, broadcast engineer, etc.

Students who obtain the degree of Associate in Applied Science are eligible for consideration for admission to curricula leading to the degree of Bachelor of Science. Approximately two additional years of study are necessary to complete the requirements for this degree.

FRESHMAN YEAR**First Semester**

- (2) EET 103 (Electronics I: Vacuum Tubes and Transistors)
- (3) EET 101 (Electrical Circuits I)
- (2) EET 113 (Electrical Engineering Technology Laboratory I)
- (5) MA 151A (Elementary Mathematics for Engineering and the Physical Sciences)
- (3) ENGL 101 (English Composition I)
- (3) Nontechnical Elective

(18)**Second Semester**

- (3) EET 153 (Electronics II)
- (3) EET 151 (Electrical Circuits II)
- (2) EET 163 (Electrical Engineering Technology Laboratory II)
- (4) GNT 136 (Physics: Mechanics and Heat)
- (3) MA 223A (Introductory Analysis I)
- (3) SPE 114 (Fundamentals of Speech Communication)

(18)**SOPHOMORE YEAR****Third Semester**

- (3) EET 203 (Electronics III)
- (3) EET 211 (Electric Machinery)
- (2) EET 213 (Electrical Engineering Technology Laboratory II)
- (3) MA 224A (Introductory Analysis II) (or nontechnical elective)
- (4) GNT 176 (Physics: Electricity, Sound, and Light)
- (3) Technical Elective

(18)**Fourth Semester**

- (3) EET 253 (Electronics IV)
- (1) EET 263 (Electrical Engineering Technology Laboratory IV)
- (2) EET Specialty Laboratory
- (3) EG 110 (Drafting Fundamentals)
- (3) Technical Elective
- (6) Nontechnical Electives

(18)**INDUSTRIAL ENGINEERING TECHNOLOGY**

This major field of specialization is designed to develop technicians to support the problem-solving and decision-making functions in management and to prepare for planning and control, work method analysis, work measurements, quality assurance and controls, and systems and procedures analysis. Practical applications of production-oriented operations research techniques, data processing, and computer programming fundamentals are stressed.

The industrial engineering technician is often initially employed in the time study, quality control, stock control, or factory layout department. As he gains experience, he may advance within the department, directly assisting a professional industrial engineer, or he may become a production supervisor. This broad technical background, together with the human relations background and a proficiency in engineering methods and mathematics, enable the industrial engineering technician to take advantage of opportunities for advancement in many directions.

FRESHMAN YEAR

First Semester	Second Semester
(3) EG 110 (Drafting Fundamentals)	(3) ENGL 101 (English Composition I)
(3) IET 104 (Industrial Organization)	(3) IET 204 (Techniques of Maintaining Quality)
(5) MA 151A (Elementary Mathematics for Engineering and the Physical Sciences)	(3) CPT 100 (Computer Utilization)
(1) MET 100 (Applied Engineering Computations)	(3) STAT 401 (Elementary Statistical Methods)
(4) GNT 136 (Physics: Mechanics and Heat)	(2) MET 335 (Basic Machining)
	(4) GNT 176 (Physics: Electricity, Sound, and Light)
<hr/> (16)	<hr/> (18)

SOPHOMORE YEAR

Third Semester	Fourth Semester
(3) ECON 210 (Principles of Economics)	(3) GNT 220 (Technical Report Writing)
(3) IET 224 (Production Planning and Control)	(3) IET 250 (Fundamentals of Production Cost Analysis)
(3) IET 262 (Motion Study and Work Methods)	(3) IET 266 (Work Measurement and Incentives)
(3) IS 152 (Human Relations in Industry)	(3) SPE 114 (Fundamentals of Speech Communication)
or	(4-6) Technical Electives
PSY 370 (Psychology in Business and Industry)	
(2) IET 220 (Critical Path Analysis)	
(3) Technical Elective	
<hr/> (17)	<hr/> (16-18)

MECHANICAL ENGINEERING TECHNOLOGY

This program of study is designed to prepare students to take employment in industries requiring services of drafting and design of a mechanical nature.

Emphasis is placed on product and tool design, mechanical maintenance, testing, inspection, and the selection of methods for efficient and economical production.

Also included are courses dealing with fundamentals of industrial management and with some of the historical, economic, and human relations aspects of our American industrial life, all related to the individual.

Graduates of this program accept jobs as laboratory technicians, engineering assistants, detailers, draftsmen, tool maintenance men, layout men, inspectors, and machine and tool salesmen. With additional experience students may aspire to positions as industrial supervisors, machine and tool designers, tool buyers, production expeditors, and cost estimator.

A cooperative work program with industry may be made available to the student, to be worked out on an individual student basis.

FRESHMAN YEAR**First Semester**

- (1) MET 100 (Applied Engineering Computations)
- (2) MET 180 (Materials and Processes)
- (2) MET 210 (Applied Statics)
- (3) EG 110 (Drafting Fundamentals)
- (3) ENGL 101 (English Composition I)
- (5) MA 151A (Elementary Mathematics for Engineering and the Physical Sciences)*

(16)**Second Semester**

- (2) MET 204 (Production Drawing)
- (4) MET 211 (Applied Strength of Materials)
- (2) MET 335 (Basic Machining)
- (3) GNT 220 (Technical Report Writing)
- (3) MA 223A (Introductory Analysis I)
- (3) SPE 114 (Fundamentals of Speech Communication)

(17)**SOPHOMORE YEAR****Third Semester**

- (3) MET 200 (Power Systems)
- (4) MET 216 (Machine Elements)
- (3) MA 224A (Analysis II)
- (4) PHYS 220 (General Physics)
- (3) Technical Elective

(17)**Fourth Semester**

- (3) MET 330 (Fluid Power)
- (3) MST 384 (Instrumentation)
- (3) IS 152 (Human Relations in Industry)
- (4) PHYS 221 (General Physics)
- (3) Technical Elective
- (3) Nontechnical Elective

(19)**NURSING**

This program of nursing education provides a means of correlating the philosophy and standards of nursing education with those of general education. The over-all standards and policies of the University apply to the program in nursing as they do to the other educational programs within the University. The associate degree program is designed to fulfill the educational needs of qualified high school graduates who want to (1) prepare for nursing in a relatively short time and (2) study in a multi-purpose collegiate institution where they share the responsibilities, privileges, intellectual, and social experiences with all other students. Clinical practice experiences are obtained in nearby cooperating hospitals. The University nursing faculty selects, supervises, and evaluates all learning experiences.

Graduates are prepared to give care to patients as beginning general duty nurses, drawing upon their scientific knowledge and understanding of human behavior and needs. They are prepared to develop satisfactory relationships with people, to cooperate and share responsibility for their patients' welfare with other members of the nursing and health staff, and to be self-directive in learning from experience as practicing nurses.

* MATHEMATICS—A student whose program requires MA 151A and who does not qualify for MA 151A, as indicated by the placement tests in algebra and trigonometry and high school grades, will be assigned to a four-semester sequence: MA 111, MA 151A, MA 223A, and MA 224A. Thus it is strongly urged that he complete MA 111 or equivalent in the summer session preceding entrance into full-time study. Otherwise, the student may require five semesters to complete his program.

Graduates of the associate degree program in nursing are eligible for state examinations for licensure as registered nurses.

All nursing courses must be taken in sequence.

FRESHMAN YEAR

First Semester		Second Semester	
(2)	BIOL 201 (Biology of Man)	(2)	BIOL 203 (Biology of Man)
(1)	BIOL 202 (Laboratory in Human Biology)	(1)	BIOL 204 (Laboratory in Human Biology)
(3)	CHM 119 (General Chemistry)	(3)	BIOL 220 (Introduction to Microbiology)
(3)	PSY 120 (Elementary Psychology)	(3)	PSY 235 (Child Psychology)
(3)	F&N 303 (Essentials of Nutrition)	(3)	PCOL 201 (Pharmacology)
(5)	NT 110 (Introduction to Nursing)	(5)	NT 120 (Maternal and Child Nursing)
<hr/>		<hr/>	
(17)		(17)	

SOPHOMORE YEAR

Third Semester		Fourth Semester	
(3)	SOC 100 (Introduction to Sociology)	(3)	NT 250 (Seminar in Nursing)
(3)	ENGL 101 (English Composition I)	(7)	NT 215 (Medical and Surgical Nursing II)
(7)	NT 214 (Medical and Surgical Nursing I)	(4)	NT 231 (Psychodynamic and Psychiatric Nursing II)
(4)	NT 230 (Psychodynamic and Psychiatric Nursing I)	(3)	Elective
<hr/>		<hr/>	
(17)		(17)	

CERTIFICATE PROGRAMS

The certificate programs are designed primarily for the more mature part-time student through consultation with representatives from labor, industry, and the service areas of our society.

These are intensive and practical programs of less than 40 semester hours of credit. Advancement in each of these programs can be varied to suit the needs of the individual students who may take one, two, or three courses each semester. The average part-time student can complete any one of the programs within three years.

Enrollment is on the basis of a program carefully tailored to meet individual student needs and vocational objectives through consultation with an experienced counselor. Changes in the student's program arising out of new work assignments or changes in vocational objective may be worked out with his counselor.

Practical Industrial Electronics

This program is a laboratory type course of study with two three-hour classes a week. One hour of explanation of electrical principles and demonstration of the use of instruments is presented at each class meeting, accompanied by two hours of laboratory experience. Training is obtained by the actual use of modern electronic instruments. Trouble-shooting techniques are emphasized.

Training in mathematics is desirable, but is not necessary that students have formal training in algebra, geometry, and trigonometry. The necessary mathematics is taught in the course. Students that pass an advanced standing examination will be admitted to the second semester or the second year course. High school graduation is not required.

FIRST YEAR

First Semester

(4) EET 15 (Basic Electricity)

Electrical terms; units, symbols; schematics; Ohm's Law; use of voltmeters, ammeters, and ohmmeters; series and parallel circuits, magnetism, inductance, capacitance. Basic principles of alternating current generators, capacitive reactance, inductive reactance, impedance, phasors, power factor, resonance, use of VTVM and oscilloscope.

Second Semester

(4) EET 23 (Transistor and Vacuum Tube Fundamentals)

Transistor fundamentals, semiconductor diodes, vacuum tube diodes, triodes, tetrodes, pentodes; use of oscilloscope, audio oscillators, and voltmeters in electronic circuits such as amplifiers, power supplies, and oscillators.

SECOND YEAR

Third Semester

(4) EET 39 (Electronic Circuits)

Transistors and vacuum tubes used in circuits. Power supply circuits, audio amplifiers, RF amplifiers, oscillators, modulation, AM transmitters and receivers, FM transmitters and receivers. Special electronic circuits such as clippers, clampers, multivibrators, blocking oscillators, sweep circuits. Trouble shooting techniques.

Fourth Semester

Two options are available:

Industrial Control Electronics

(4) EET 41 (Electronic Control Circuits)

Rotating electrical machinery and control circuits, servomechanism components such as error detectors, amplifiers, detectors, magnetic amplifiers. Specialized electronic control circuits.

Communications Electronics

(4) EET 45 (Communications Electronics)

Principles of television, UHF, microwaves, transmitters and receivers, FCC Exam information, trouble shooting techniques.

Professional Foremanship

The Professional Foremanship Certificate Program is an intensive and practical curriculum equivalent to 36 semester hours. It is intended to provide foremen with the professional education needed to handle the many supervisory and technical problems which they meet daily in technical, communications, and human relations fields.

The program has been set up by representatives of industry, professional foremen organizations, and the University. It is designed to meet the needs of management, which is vitally concerned with training foremen for positions of leadership.

The Professional Foremanship Program is the certificate program counterpart of the industrial engineering technology two-year curriculum. Course selection is on the basis of a program worked out with the counselor assigned and is carefully tailored to individual needs.

Admission to the program is granted to those mature adults in management positions who meet the entrance standards and requirements.

Candidates may be admitted as degree or nondegree students. Specific questions concerning the program should be directed to the professional foremanship coordinator at the North Central Campus.

REQUIRED COURSES

- (1) ENGL 185 (Developmental Reading)
- (3) IET 104 (Industrial Organization and Production)
- (3) IS 152 (Human Relations in Industry)
- (3) SPE 114 (Fundamentals of Speech Communication)

(10)

Optional Courses—14 semester hours maximum chosen from one or a combination of the following groups:

Group I—6 semester hours maximum

- English and Report Writing 6 hours maximum
- Advanced courses in Speech 3 hours maximum

Group II—14 semester hours maximum

Courses specific to two-year certificate curricula—14 semester hours maximum. Courses from one or more technologies may be elected in this group provided that (1) they relate directly to the individual's duties, responsibilities, or line of promotability; and (2) prior approval of the counselor and the head of the department administering the program is obtained.

Group III—6 semester hours maximum

- Economics and Labor Relations 6 hours maximum
- Psychology 6 hours maximum

MANAGEMENT EXPERIENCE
(Equivalent to 12 semester hours)

Before receiving the Professional Foremanship Certificate, the candidate must have had two years of successful experience in the management field. Satisfaction of this requirement is met by a confirming letter from the managerial employer under whom the candidate worked. Formal credit is not established for this work, but is considered equivalent to 12 semester hours of credit in the Professional Foremanship program.

BACHELOR OF SCIENCE DEGREE IN INDUSTRIAL EDUCATION

The Department of Industrial Education consists of two sections: industrial arts, and vocational-technical. Each section is concerned with one or more programs and activities designed to equip men and women for entrance into career fields that require an intellectual base upon which practical applications of the knowledge gained in the humanities, the sciences, and the technologies

depend. Thus, the courses provided offer a combination of theoretical and practical education.

Graduate and undergraduate programs which prepare students for entrance into a variety of careers in business, education, government, and industry are available. Students may elect to pursue an option or major which will lead to the degree of Bachelor of Science in Industrial Education with a specialty in one of the following areas:

1. Technology Teaching (Junior College and Technical Institute Teaching)
2. Industrial Arts Teaching
3. Vocational-Industrial Teaching

BACHELOR OF SCIENCE DEGREE FOR A.A.S. TECHNICIANS

Through its School of Technology, the University has recognized the need of the graduate of two-year Associate in Applied Science degree and similar curricula for further and broader education. New third- and fourth-year curricula have been especially developed to lead to the Bachelor of Science degree for such students.

The baccalaureate program provides the general education which permits the graduate to engage in a significantly broader span of activities. It provides a very important background in interdisciplinary studies and creates a greater potential for the graduate. It also enables the graduate to do additional work in his area of specialization.

This program was designed by the School of Technology with the active assistance of industry. It is offered to enable the engineering technician, and similar students who have completed an associate degree program, to improve his performance and increase significantly his promotability.

Graduate Study

GRADUATE COURSES are available at the Purdue North Central Campus. These courses are under the direction of their respective departments subject to the rules and regulations of the Graduate School of Purdue University. All courses offered by the University at any campus are subject to the same standards of quality.

ADMISSION

Students may be admitted to the Graduate School and undertake work at the North Central Campus in one of two categories: (1) regular graduate students, and (2) nondegree students.

Regular Graduate Students

Students who have advanced degree objectives will be admitted as regular graduate students if they have the following qualifications:

They will ordinarily be expected to hold a baccalaureate degree from a college or university of recognized standing. Under special circumstances individuals who do not have a baccalaureate degree will be considered for admis-

sion if they have completed studies equivalent to those required for a baccalaureate degree program at Purdue.

All candidates for admission as regular graduate students must show promise, as judged by academic performance and experience, of ability to perform advanced study and research, and must have adequate preparation in their chosen field of study. Applicants must submit complete official transcripts of all previous college and university studies.

Nondegree Students

Such students are not admitted with advanced degree objectives and are not eligible to become candidates for advanced degrees under this classification.

Subclassifications at the North Central Campus are:

1. Temporary Graduate Students admitted on the basis of the educational services which can be extended to them in meeting their individual needs—other than degrees.

2. Teaching License Objectives. Intended for baccalaureate degree holders seeking to work on teacher license programs without degree objectives either preceding or following an advanced degree program.

GRADUATE ADVISING

Graduate programs are intended to be highly individualized, whenever feasible, thus each student is guided by a major professor and an advisory committee. Degree seeking students should contact the assigned graduate advisor for assistance.

GRADUATE RECORD EXAMINATION

An applicant who falls in one or more of the following four categories is expected to take the Aptitude Test Section of the Graduate Record Examination.

1. If he received his bachelor's degree from a nonaccredited institution.

2. If he expects to major in aeronautics, astronautics and engineering sciences, chemical engineering, child development and family life, clothing and textiles, economics, equipment and family housing, foods and nutrition, history, home management and family economics, industrial education, industrial relations, institutional management, nuclear engineering, physical education for women, political science, psychology, or sociology. Other departments may be added to this list.

3. If he feels that his previous academic record does not adequately reflect his ability.

4. If he is to be considered for certain fellowship programs. He will be informed of this requirement when he applies for the fellowship.

Information regarding testing dates and locations may be obtained by writing to the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey.

SPECIFIC COURSE DESCRIPTION

Descriptions of specific courses may be found in the graduate school catalog.

Administration and Instructional Staff

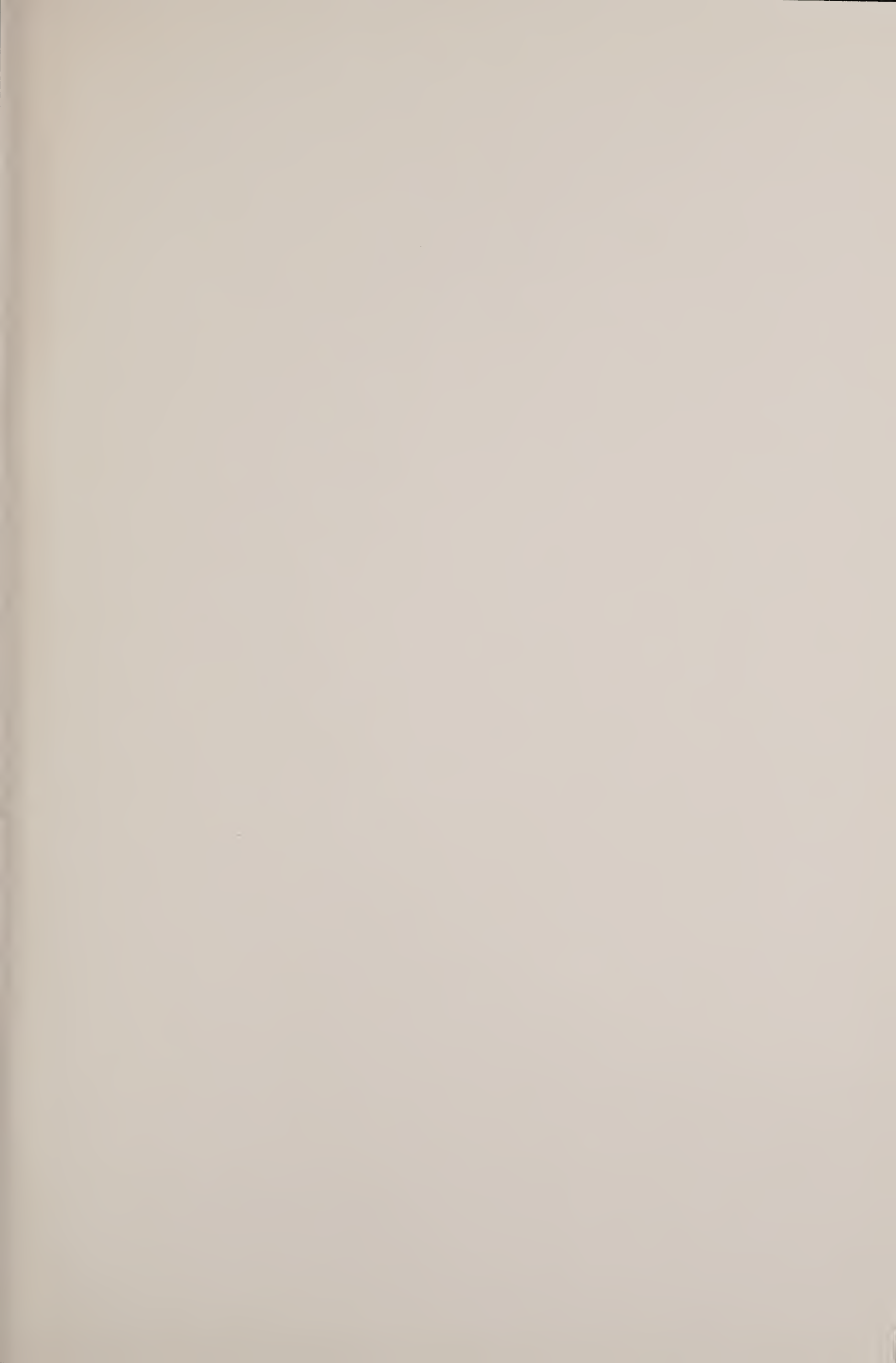
- JAMES E. ALRED (1964).....Lecturer in Mechanical Engineering Technology B.S.M.E., Tennessee Polytechnic, 1956.
- DANIEL P. ANDERSON (1968)....Instructor in Industrial Management B.S., Northwestern, 1967; M.B.A., Michigan, 1968.
- JESS M. BARTHOLOMEW (1966)..Instructor in Electrical Engineering Technology A.B., William Jewell, 1925.
- LOUIS E. BEDNAR (1965).....Assistant Professor of Mathematics B.S.Ed., Western Illinois, 1963; M.S., Northern Illinois, 1965.
- BRIAN R. BETZ (1968).....Lecturer in Speech B.A., St. Meinrad, 1955; M.A., Northwestern, 1962.
- JOHN K. BLACK (1967).....Business Manager B.S.I.M., Purdue, 1964.
- JAMES R. BLACKWELL (1965)....Assistant Dean of North Central Campus with the rank of Associate Professor; Regional Manager, North Central Region B.S., Purdue, 1941; M.A., Louisville, 1953; M.B.A., George Washington, 1964.
- LEONARD R. BLYTHE (1968)....Graduate Instructor in Education B.A., Wheaton, 1956; M.S., Purdue, 1966.
- RAYMOND M. BOBILLO (1962)....Assistant Professor of Industrial Engineering Technology B.S., Ball State, 1950; M.B.A., Illinois Institute of Technology, 1967.
- RONALD G. BOHLEY (1967)....Librarian with the rank of Assistant Professor B.A., Purdue, 1964; M.A., Indiana, 1967.
- ANITA O. BOWSER (1956).....Assistant Professor of Political Science A.B., Kent State, 1945; LL.B., William McKinley School of Law, 1949; M.A., Purdue, 1967.
- WILLIAM C. BOYD (1966).....Coordinator of Continuing Education with the rank of Assistant Professor B.M., Michigan, 1936; M.Mus., Michigan State, 1941.
- DONALD R. BRADLEY (1968)....Lecturer in Industrial Engineering Technology B.S., Southern Illinois, 1961.
- THOMAS F. BRADY (1965).....Lecturer in Industrial Engineering Technology B.S., Indiana, 1958.
- WILFRED BRILL (1967).....Assistant Professor of Physics B.A., Manchester, 1952; M.S., Purdue, 1955; Ph.D., 1964.
- DAVID BRUBECK (1967).....Director, Buildings and Grounds B.S.C.E., Purdue, 1941.
- PATRICIA W. BRUBECK (1967)..Lecturer in Art and Design B.A., New Mexico, 1966; M.A.T., Indiana, 1967.
- EDWIN F. BUCK (1966).....Assistant Professor of Speech B.A., Emmanuel Missionary, 1944; M.A., Andrews, 1964; Ph.D., Michigan State, 1968.
- JAMES M. CLOUSER (1968)....Lecturer in Electrical Engineering Technology B.S.E.E., Lehigh, 1968.
- RUTH DANALD (1967).....Instructor in Modern Languages B.A., Douglass, 1942; M.A., Montana State, 1964.
- ANGELA J. DELVECCHIO (1966)....Associate Professor of Nursing B.S., Chicago, 1945; M.A., Columbia, 1953; M.Ed., 1966.
- THOMAS A. DWYER (1968)....Lecturer in Architectural Technology B.Arch., Notre Dame, 1964.
- JOHN E. ENGSTROM (1967)....Lecturer in Mechanical Engineering Technology B.S.M.E., Purdue, 1949.
- RONALD G. ERICKSON (1968)....Lecturer in General Studies B.S., Ball State, 1960.
- WALTER H. EVANS (1968).....Assistant Professor of Computer Technology B.A., Purdue, 1941; M.A., Michigan, 1959.
- DAVID FRANK (1967)....Assistant Professor of Education B.S.Ed., Shippensburg State, 1954; M.Ed., Western Maryland, 1958.
- JEENE W. GAINES (1964)....Associate Professor of Psychology B.A., Iowa, 1955; M.S., Purdue, 1956; Ph.D., 1959.
- JAMES GALLAGHER (1967).....Assistant Professor of Computer Technology B.A., St. John's 1947.
- BEULA C. GLICK (1967)....Assistant Professor of Nursing B.S.N., Goshen, 1965; M.S.N., Washington, 1967.
- FRANCES M. GOURLEY (1948)....Lecturer in Biology B.S., Illinois, 1935; M.S., 1940.
- ROBERT W. GRENIER (1968)....Lecturer in Industrial Engineering Technology B.A., Assumption, 1951; M.B.A., Western Reserve, 1961.
- ROBERT W. GROENDYKE (1968)..Lecturer in Electrical Engineering Technology B.S.E.E., Purdue, 1958.
- DENNIS A. GUSE (1968).....Lecturer in Speech B.S., Wisconsin State University, 1959; M.A., Indiana, 1961.
- ROBERT M. HAWTHORNE (1968).....Assistant Professor of Chemistry B.S., Columbia, 1956; Ph.D., Rutgers, 1963.
- HERBERT HECKENDORN (1966)....Lecturer in Industrial Supervision B.B.A., Clarkson College of Technology, 1956.
- ESTHER HENDRIX (1966).....Instructor in Biology A.Sci., Vincennes, 1951; B.A., Olivet, 1963; M.A., California, 1966.
- JAMES HOWELL (1968).....Lecturer in Mathematics B.A., Valparaiso, 1950; M.S., Purdue, 1963.
- ELLIOTT C. HUTTON (1961).....Lecturer in Mechanical Engineering Technology B.S., Iowa State Teachers, 1936; M.S., Oregon State, 1939.

- HOWARD JABLON (1966).....Assistant Professor of History
B.A., Hofstra, 1961; M.A., Rutgers, 1962; Ph.D., 1967.
- JOHN JOHNSTON (1965).....Lecturer in Chemistry
B.S., College of Technology, London, 1958.
- NORA S. KINZER (1968).....Graduate Instructor in Sociology
B.A., Toronto, 1958; M.A., Middlebury, 1959.
- JOSEPH F. KOLO (1968).....Lecturer in Industrial Engineering Technology
B.S., Roosevelt, 1951.
- DAVID P. KONZELMANN (1966).....Admissions Officer with the rank of Assistant Professor
B.S., Butler, 1960; M.S.Ed., Purdue, 1964.
- GEORGE L. KVITEK (1968).....Assistant Professor of Electrical Engineering Technology
B.S., Illinois, 1949; M.S., 1950; M.S., 1951.
- DENNIS E. LAUER (1968).....Instructor in Mathematics
B.S., Kansas, 1960; M.S., 1963; M.S., Purdue, 1966.
- FREDERICK R. LISARELLI (1946).....Associate Professor of Mechanical Engineering Technology
B.S., Alabama, 1938; M.A., Columbia, 1946.
- CLYDE DeLOS LONZO (1954).....Lecturer in History
A.B., Franklin, 1947; M.A., Indiana 1952.
- BARBARA M. LOOTENS (1965).....Instructor in English
A.B., Indiana, 1950; M.A., Valparaiso, 1967.
- WILLIAM L. MARCH (1968).....Lecturer in English
B.A., Indiana, 1954; M.A., Chicago, 1956.
- RICHARD G. MEHLER (1968).....Registration Officer with the rank of Assistant Professor
B.S., Purdue, 1960; M.S., 1962.
- HOWARD D. MURDOCK (1946).....Associate Professor of Chemistry
B.S., Notre Dame, 1937; M.A., 1940.
- ZOE S. NEW (1968).....Instructor in Nursing
B.S., Southwestern Louisiana, 1967.
- HAROLD W. PHILLIPS (1968).....Instructor in English
A.B., DePauw, 1948.
- CLYDE L. PORTER, JR. (1968).....Associate Professor of Biology
B.S., South Carolina, 1957; M.S., 1959; Ph.D., Oklahoma, 1963.
- VERNER J. RAEALSON (1966).....Assistant Professor of Physics
B.A., Valparaiso, 1940; LL.B., 1942; M.S., Chicago, 1955.
- YVONNE G. RAMSEY (1968).....Assistant Professor of Nursing
B.S., Wayne State, 1956; M.S., 1959.
- ROBERT C. RENTZ (1968).....Instructor in Modern Languages
B.S., Mankato State, 1954; M.A., Nebraska, 1956.
- BEVERLY J. RESAN (1968).....Instructor in Nursing
B.S., Indiana, 1968.
- KARL RICHTER (1965).....Lecturer in Philosophy
Frederich Wilhelm, 1933; Jewish Theological Seminary, 1934; D.D., Hebrew Union, 1960.
- DAVID J. ROSS (1968).....Lecturer in Mechanical Equipment
B.S.E.E., Purdue, 1949.
- ANNE A. RUETZ (1968).....Lecturer in Foods and Nutrition
B.S., Webster, 1948.
- ROBERT E. RYAN (1968).....Associate Professor of English
B.A., Loyola, Los Angeles, 1954; M.A., 1956; Ph.D., Southern California, 1967.
- ROGER J. SCHORR (1968).....Lecturer in Marketing
B.S., Indiana State, 1965; M.B.A., 1967.
- RALPH E. SCHREIBER (1968).....Instructor in Mathematics
B.S., Purdue, 1965; M.S., 1968.
- ROBERT F. SCHWARZ (1952).....Dean and Director of the North Central Campus; Professor of General Studies
A.B., Indiana, 1950; M.S., 1960.
- AVINASH R. SHAH (1968).....Lecturer in Mechanical Engineering Technology
B.S., Indiana Institute of Technology, 1964; M.S., Wisconsin, 1967.
- JAMES W. SIMS (1967).....Lecturer in Mathematics
B.S., Indiana State, 1948; M.S., 1951.
- HENRY SOKOLOWSKI (1968).....Instructor in Modern Languages
B.A., Purdue, 1967; M.A., 1968.
- JOHN J. STANFIELD (1964).....Assistant Professor of English
B.A., Indiana, 1951; M.A., 1961.
- WILLIAM L. STOAKES (1968).....Assistant Professor of Electrical Engineering Technology
B.S.E.E., Iowa State, 1949; M.S.E.E., Purdue, 1959.
- LAWRENCE T. TANBER (1952).....Lecturer in Mechanical Engineering Technology
A.T.A., Purdue, 1951.
- RICHARD L. TAYLOR (1966).....Assistant Professor of Civil Engineering Technology
B.S.C.E., Purdue, 1963; M.S.C.E., 1965.
- HERMAN J. TERZINO (1968).....Lecturer in Architectural Technology
B.A., Catholic, 1950.
- KENNETH E. VANDER LINDEN (1966).....Lecturer in Industrial Engineering Technology
B.S., Iowa State, 1966.
- DANIEL R. VELLENGA (1967).....Lecturer in Economics
B.S., Illinois, 1961; M.B.A., 1963.
- JOHN J. WAGLIARDO (1968).....Student Affairs Officer with the rank of Assistant Professor
A.A., Southwestern A/G. College, 1955; B.A., East Texas State, 1957; M.Ed., 1958.
- MARGARETHA W. WOODARD (1966).....Associate Professor of Biology
B.S., South Africa, 1943; M.S., 1944; Ph.D., Virginia, 1949.

INDEX

Abbreviations	19	Physics	33
Administrative officers	4	Plans of study	19
Admission	6	Agriculture	19
Advanced credit	10	preveterinary science and medicine	20
Agriculture, School of	19	Engineering	22
Applied science, associate degree	34	freshman	22
Architectural engineering technology	35	general education	19
Auditing classes	10	Home Economics	24
Audiology and speech sciences	26	Humanities, Social Science,	
Associate degree	34	and Education	24
		areas of concentration	26
B.A. general program	25	audiology and speech sciences	26
Bachelor of physical education	28	elementary education	28
B.S. general program	31	general program, B.A.	25
Biological sciences	31	physical education for men	23
		physical education for women	23
Calendar	IFC	psychology	27
Certificate programs	42	teacher certification programs	27
Chemistry	32	Industrial Management	23
College entrance examination board tests...	7	economics	29
Computer Technology	36	Science	30
Counseling	12	biological sciences	31
		chemistry	30
Degrees with distinction	18	general program, B.S.	31
Diploma fees	14	mathematics	32
Distinguished students	17	physics	33
Drop index	17	prepharmacy	33
Dropping and adding courses	12	Technology	34
Dropping of students	17	associate degree programs	34
		architectural engineering technology	35
Economics	29	certificate programs	42
Electrical engineering technology	38	computer technology	36
Elementary education	28	electrical engineering technology	38
Engineering, schools of	21	industrial education	44
		industrial engineering technology	39
Fees	13	mechanical engineering technology	40
Financial aid	12	nursing	41
Freshman engineering	22	professional foremanship	43
		Predentistry	31
Good standing	16	Premedicine	31
Grading	14	Prepharmacy	33
Graduate study	45	Preveterinary science and medicine	20
Graduation index requirements	16	Probation, scholastic	17
		Probation index	17
Home Economics, school of	24	Professional foremanship certificate program.	43
Humanities, Social Science, and		Psychology	27
Education, school of	24	Purdue, information about	5
Industrial education	44		
Industrial engineering technology	39	Readmission of students	10
Industrial management	28	Reentry students	10
Information, general	5	Refunds	14
Instructional staff	47	Regional campus administration	4
Instruction, officers of	4	Registration	10
Insurance	13	Requirements, admission	6
Loans	12	Scholarship indexes	16
		Scholarships	12
Mathematics	32	Scholastic probation	16
Mechanical engineering technology	40	Science, school of	30
Medical technology	31	Staff	47
Military training	10	Superior students	17
Nondegree students	9	Teacher education, cooperative program	27
Nonresident admission	9	Technology, school of	34
Nursing	41	Transfer students	9
Officers of administration and instruction ...	4	University Extension Council	IBC
Out-of-state applicants	9	University fees	13
Physical education for men	28	Withdrawal	15
Physical education for women	28		





PURDUE UNIVERSITY
NORTH CENTRAL CAMPUS
Jct. U.S. 421 and Indiana Toll Road
Westville, Indiana 46391
Return Requested

